





) eye LCD - 4600/5500/6500 - OPS

User Manual

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) eyevis user document

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About this Manual

Read and pay attention to this manual. It contains important information on the product. In particular, note all of the safety instructions and warnings.

Keep this manual in a safe place!

Warnings used

NOTICE

Indicates a hazard that could lead to damage or destruction of the product.



The general warning symbol indicates a hazard that could lead to **injuries or death**. In the text section, the general warning symbol is used in conjunction with the warning levels described below.

A CAUTION

Indicates a hazard that could lead to minor or moderate injuries.

⚠ WARNING

Indicates a hazard that could lead to death or serious injury.

⚠ DANGER

Indicates a hazard that leads to immediate death or serious injury.

Symbols used

•	Indicates a single action or multiple actions which do not have to be performed in any specific order.
1.	Indicates a set of actions that have to be performed in a specific
2.	order.
3.	



Safety / Sicherheit / Sécurité

Safety

Safety precaution

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD product, please read the following precautions carefully before using the product.

-) Read instructions All operating instructions must be read and understood before the product is operated.
-) Keep this manual in a safe place These safety and operating instructions must be kept in a safe place for future reference.
-) Observe warnings All warnings on the product and in the instructions must be observed closely.
-) Follow instructions All operating instructions must be followed.
-) Cleaning Unplug the power cord from the AC outlet before cleaning the product. Use a dry cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
-) Attachments Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
-) Water and moisture Do not use the product near water. Do not install the product in a place where water may splash onto it. Be careful of equipment which drains water such as an air-conditioner.
-) Ventilation The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a sofa, rug or other similar surface, since they can block ventilation openings. Do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
-) Power cord protection The power cords must be routed properly to prevent people from stepping on them or objects from resting on them.
-) The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the LCD panel breaks.
-) Overloading Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
-) Entering of objects and liquids Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
-) Servicing Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.

-) Repair If any of the following conditions occurs, unplug the power cord from the AC outlet, and request a qualified service person to perform repairs.
- When the power cord or plug is damaged.
- When a liquid was spilled on the product or when objects have fallen into the product.
- When the product has been exposed to rain or water.
- When the product does not operate properly as described in the operating instructions.
- Do not touch the controls other than those described in the operating
 instructions. Improper adjustment of controls not described in the
 instructions can cause damage, which often requires extensive adjustment
 work by a qualified technician.
- When the product has been dropped or damaged.
- When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
-) Replacement parts In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorised parts can result in fire, electric shock and/ or other danger.
-) Safety checks Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
-) Wall mounting When mounting the product on a wall, be sure to install the product according to the method recommended by the manufacturer.
-) Heat sources Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).
-) Batteries Incorrect use of batteries may cause the batteries to burst or ignite. A leaky battery may corrode the equipment, dirty your hands or spoil your clothing. In order to avoid these problems, make sure to observe the precautions below:
- Use the specified batteries only.
- Install the batteries with due attention to the plus (+) and minus (-) sides of the batteries according to the instructions in the compartment.
- Do not mix old and new batteries.
- Do not mix batteries of different types. Voltage specifications of batteries of the same shape may vary.
- Replace an exhausted battery with a new one promptly.
- If you will not use the remote control for a long time, remove the batteries.
- If leaked battery fluid gets on your skin or clothing, rinse immediately and thoroughly. If it gets into your eye, bathe your eye well rather than rubbing and seek medical treatment immediately. Leaked battery fluid that gets into your eye or your clothing may cause a skin irritation or damage your eye.
-) Usage of the monitor must not be accompanied by fatal risks or dangers that, could lead directly to death, personal injury, severe physical damage or other loss, including nuclear reaction control in nuclear facility, medical life support system, and missile launch control in a weapon system.
-) Do not stay in contact with the parts of the product that become hot for long periods of time. Doing so may result in low-temperature burns.



Safety Intructions

-) The TFT colour LCD panel used in this monitor is made with the application of high precision technology. However, there may be minute points on the screen where pixels never light or are permanently lit. Also, if the screen is viewed from an acute angle there may be uneven colours or brightness.
-) Please note that these are not malfunctions but common phenomena of LCDs and will not affect the performance of the monitor.
-) Do not display a still picture for a long period, as this could cause a residual image.
-) Never rub or tap the monitor with hard objects.
-) Please understand that eyevis bears no responsibility for errors made during use by the customer or a third party, nor for any other malfunctions or damage to this product arising during use, except where indemnity liability is recognized under law.
-) This monitor and its accessories may be upgraded without advance notice.
-) Do not use the monitor where there is a lot of dust, where humidity is high, or where the monitor may come into contact with oil or steam, as this could lead to fire.
-) Ensure that the monitor does not come into contact with water or other liquids. Ensure that no objects such as paper clips or pins enter the monitor as this could lead to fire or electric shock.
-) Do not place the monitor on top of unstable objects or in unsafe places. Do not allow the monitor to receive strong shocks or to strongly vibrate. Causing the monitor to fall or topple over may damage it.
-) Do not use the monitor near heating equipment or in places where there is likelihood of high temperature, as this may lead to generation of excessive heat and outbreak of fire.
-) Do not use the monitor in places where it may be exposed to direct sunlight.
-) Please be sure to constantly remove dust and garbage that has attached to the ventilation opening. If dust collects in the ventilation opening, it may lead to excessive heat, outbreak of fire, or malfunction. As a standard, clean the inside of the monitor once every year. If dust collects inside the monitor, it may lead to excessive heat, outbreak of fire, or malfunction. Please request a cleaning of the inside of the monitor from an authorized Eyevis servicing dealer or service centre.
-) Images cannot be rotated on this monitor.
-) When using in vertical orientation, you will need to prepare appropriately orientated content in advance.
-) Please make sure that the socket-outlet is installed near the System and is easily accessible. The Power supply cord serves as a disconnect device.



The Power Cord

-) Do not damage the power cord nor place heavy objects on it, stretch it or over bend it.
-) Do not use damaged extension cords. Damage to the cord may result in fire or electric shock.
-) Use only the power cord supplied with the monitor.
-) Do not use the power cord with a power tap. Adding an extension cord may lead to fire as a result of overheating.
-) Do not remove or insert the power plug with wet hands. Doing so could result in electric shock.
-) Unplug the power cord if it is not used for a long time.
-) Do not attempt to repair the power cord if it is broken or malfunctioning. Refer the servicing to the service representative.



NOTICE

This is a class A product according EN 55022: 2010. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate counter measures.

NOTICE

To maintain compliance with EMC regulations, use shielded cables to connect to the following terminals:

PC/AV DVI-D output terminal, PC/AV DVI-D input terminal, PC/AV HDMI input terminal, PC D-SUB input terminal, PC RGB input terminals, and RS-232C input/output terminals.

⚠ WARNING

If a monitor is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using fixing devices like wall mount brackets recommended by the manufacturer.
- Only using furniture that can safely support the monitor.
- Ensuring the monitor is not overhanging the edge of the supporting furniture.
- Not placing the monitor on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the monitor to a suitable support.
- Not standing the monitors on cloth or other materials placed between the monitor and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the monitor or its controls.

⚠ WARNING

Especially for child safety

- Don't allow children to climb on or play with the monitor.
- Don't place the monitor on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger than life" monitor. Care should be taken to place or install the monitor where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the monitor so that they cannot be pulled or grabbed by curious children.



Zu diesem Handbuch

Lesen und beachten Sie dieses Handbuch. Darin stehen wichtige Informationen zum Produkt. Beachten Sie insbesondere alle Sicherheits- und Warnhinweise.

Bewahren Sie diese Anleitung sorgfältig auf!

Verwendete Warnhinweise

ACHTUNG

Kennzeichnet eine Gefahr, die zur **Beschädigung oder Zerstörung des Produkts** führen kann.



Das allgemeine Warnsymbol kennzeichnet eine Gefahr, die zu **Verletzungen oder zum Tod** führen kann. Im Textteil wird das allgemeine Warnsymbol in Verbindung mit den nachfolgend beschriebenen Warnstufen verwendet.

△ VORSICHT

Kennzeichnet eine Gefahr, die zu **leichten oder mittleren Verletzungen** führen kann.

MARNUNG

Kennzeichnet eine Gefahr, die zum **Tod** oder zu **schweren Verletzungen** führen **kann**.

⚠ GEFAHR

Kennzeichnet eine Gefahr, die **unmittelbar** zum **Tod** oder zu **schweren Verletzungen** führt.

Verwendete Symbole

>	Kennzeichnet einen einzelnen Handlungsschritt oder mehrere Handlungsschritte, jedoch ohne feste Abfolge.
1.	Kennzeichnet ein Folge von Handlungsschritten, deren
2.	vorgegebene Reihenfolge eingehalten werden muss.
3.	



Sicherheit

Sicherheitsvorkehrungen

Elektrizität erfüllt viele nützliche Aufgaben, kann aber auch Personen- und Sachschäden verursachen, wenn sie unsachgemäß gehandhabt wird. Dieses Produkt wurde mit Sicherheit als oberster Priorität konstruiert und hergestellt. Dennoch besteht bei unsachgemäßer Handhabung u.U. Stromschlag- und Brandgefahr. Um mögliche Gefahren zu vermeiden, befolgen Sie beim Aufstellen, Betreiben und Reinigen des Produkts bitte die nachstehenden Anleitungen. Lesen Sie im Interesse Ihrer eigenen Sicherheit sowie einer langen Lebensdauer des LCD-Gerätes zunächst die nachstehenden Hinweise durch, bevor Sie das Produkt in Verwendung nehmen.

-) Bedienungsanleitungen lesen Nehmen Sie das Produkt erst in Betrieb, nachdem Sie alle diesbezüglichen Hinweise gelesen und verstanden haben.
-) Bedienungsanleitung aufbewahren Diese Bedienungsanleitung mit den Sicherheits- und Bedienungshinweisen sollte aufbewahrt werden, damit Sie im Bedarfsfall jederzeit darauf zurückgreifen können.
-) Warnungen beachten Alle Warnungen auf dem Gerät und in den Bedienungsanleitungen sind genauestens zu beachten.
-) Anleitungen befolgen Alle Anleitungen zur Bedienung müssen befolgt werden.
-) Reinigung Ziehen Sie vor dem Reinigen des Produkts das Netzkabel. Reinigen Sie das Gerät mit einem trockenen Tuch. Verwenden Sie keine flüssigen Reiniger oder Aerosol-Sprays.
-) Zusatzgeräte und Zubehör Verwenden Sie ausschließlich vom Hersteller empfohlenes Zubehör. Bei Verwendung anderer Zusatzgeräte bzw. Zubehörteile besteht evtl. Unfallgefahr.
-) Wasser und Feuchtigkeit Benutzen Sie das Gerät nicht in der Nähe von Wasser. Montieren Sie das Gerät unter keinen Umständen an einer Stelle, an der Wasser darauf tropfen kann. Achten Sie dabei besonders auf Geräte, aus denen zuweilen Wasser tropft, wie etwa Klimaanlagen.
-) Belüftung Die Belüftungsschlitze und andere Öffnungen im Gehäuse dienen der Belüftung des Geräts.
-) Halten Sie diese Öffnungen unbedingt frei, da eine unzureichende Belüftung zu einer Überhitzung bzw. Verkürzung der Lebensdauer des Produkts führen kann. Stellen Sie das Gerät nicht auf ein Sofa, einen Lappen oder ähnliche Oberflächen, da die Belüftungsschlitze dadurch blockiert werden können. Stellen Sie das Gerät auch nicht in ein umschlossenes Gehäuse, wie z.B. in ein Bücherregal oder einen Schrank, sofern dort nicht für eine ausreichende Belüftung gesorgt ist oder die Anweisungen des Herstellers befolgt werden.
-) Netzkabel-Schutz Die Netzkabel sind so zu verlegen, dass sie vor Tritten geschützt sind und keine schweren Objekte darauf abgestellt werden.
-) Das LCD-Panel ist ein Glasprodukt. Es kann daher brechen, wenn es zu Boden fällt oder einen Schlag oder Stoß erhält. Achtung: bei einem Bruch des LCD-Panels besteht durch die Glasstücke Verletzungsgefahr.
-) Überlastung Vermeiden Sie eine Überlastung von Netzsteckdosen und Verlängerungskabeln. Bei Überlastung besteht Brand- und Stromschlaggefahr.
-) Eindringen von Gegenständen und Flüssigkeiten Schieben Sie niemals irgendwelche Gegenstände durch die Gehäuseöffnungen in das Innere des Geräts. Im Produkt liegen hohe Spannungen vor. Durch das Einschieben von



Gegenständen besteht Stromschlaggefahr bzw. die Gefahr von Kurzschlüssen zwischen den Bauteilen. Aus demselben Grunde dürfen auch keine Flüssigkeiten auf das Gerät verschüttet werden.

-) Wartung Versuchen Sie auf keinen Fall, selbst Wartungsarbeiten am Gerät durchzuführen. Durch das Entfernen von Abdeckungen setzen Sie sich hohen Spannungen und anderen Gefahren aus. Lassen Sie sämtliche Wartungsarbeiten ausschließlich von qualifiziertem Service-Personal ausführen.
-) Reparaturen Ziehen Sie in den folgenden Situationen sofort das Netzkabel und lassen Sie das Produkt von qualifiziertem Service-Personal reparieren:
- Wenn das Netzkabel oder der Netzstecker beschädigt ist.
- Wenn Flüssigkeit in das Gerät eingedrungen ist oder Gegenstände in das Gerät gefallen sind.
- Wenn das Gerät nass geworden ist (z.B. durch Regen).
- Wenn das Gerät nicht wie in der Bedienungsanleitung beschrieben funktioniert.
- Nehmen Sie nur die in den Bedienungsanleitungen beschriebenen Einstellungen vor. Unsachgemäße Einstellungen an anderen Reglern können zu einer Beschädigung führen und machen häufig umfangreiche Einstellarbeiten durch einen qualifizierten Service-Techniker erforderlich.
- Wenn das Produkt fallen gelassen oder beschädigt wurde.
- Wenn das Gerät einen anormalen Zustand aufweist. Jedes erkennbare anormale Verhalten zeigt an, dass der Kundendienst erforderlich ist.
-) Ersatzteile Wenn Ersatzteile benötigt werden, stellen Sie bitte sicher, dass der Service-Techniker nur die vom Hersteller bezeichneten Teile oder Teile mit gleichen Eigenschaften und gleichem Leistungsvermögen wie die Originalteile verwendet. Die Verwendung anderer Teile kann zu einem Brand, zu Stromschlag oder anderen Gefahren führen.
-) Sicherheitsüberprüfungen Lassen Sie vom Service-Techniker nach Serviceoder Reparaturarbeiten eine Sicherheitsüberprüfung vornehmen, um sicherzustellen, dass das Produkt in einem einwandfreien Betriebszustand ist.
-) Wandmontage Bei der Montage des Gerätes an der Wand ist sicherzustellen, dass die Befestigung nach der vom Hersteller empfohlenen Methode erfolgt.
-) Wärmequellen Stellen Sie das Produkt nicht in der Nähe von Heizkörpern, Heizgeräten, Öfen oder anderen Geräten (wie z.B. Verstärkern) auf, die Hitze abstrahlen.
-) Batterien Durch falsche Anwendung können die Batterien explodieren oder sich entzünden. Eine undichte Batterie kann Korrosion am Gerät verursachen sowie Hände und Kleidung verschmutzen. Um diese Probleme zu vermeiden, beachten Sie bitte die folgenden Sicherheitshinweise:
- Verwenden Sie nur empfohlene Batterietypen.
- Achten Sie beim Einlegen der Batterien darauf, dass die Plus- (+) und die Minus- (-) Seite der Batterien gemäß den Anweisungen im Fachinneren richtig ausgerichtet sind.
- Verwenden Sie nicht alte und neue Batterien gemeinsam.
- Verwenden Sie keine Batterien unterschiedlichen Typs. Batterien derselben Form können unterschiedliche Spannungswerte besitzen.
- Ersetzen Sie eine leere Batterie sofort durch eine neue.
- Wenn Sie die Fernbedienung längere Zeit nicht verwenden, entnehmen Sie die Batterien.



- Wenn ausgetretene Batterieflüssigkeit auf Haut oder Kleidung gelangt, müssen Sie diese sofort gründlich mit Wasser spülen. Wenn Batterieflüssigkeit in die Augen gelangt, dürfen Sie die Augen auf keinen Fall reiben, sondern am besten mit viel Wasser spülen und sofort einen Arzt aufsuchen. Batterieflüssigkeit kann Hautreizungen hervorrufen oder Augenschäden verursachen
-) Bei der Verwendung des Monitors ist darauf zu achten, dass Gefahren für Leib und Leben, Schäden an Gebäuden und anderen Gegenständen sowie eine Beeinflussung von wichtigen oder gefährlichen Geräten, wie z.B. der Nuklearreaktionssteuerung in Atomanlagen, lebenserhaltenden Geräten in medizinischen Einrichtungen oder Raketenabschusssteuerungen in Waffensystemen vermieden werden.
-) Vermeiden Sie es, Teile des Produkts, die sich erwärmen, über längere Zeit hinweg zu berühren. Dies könnte zu leichten Verbrennungen führen.

Sicherheitshinweise

-) Bei der Herstellung des TFT Farb-LCD-Panels dieses Monitors wurde Präzisionstechnologie eingesetzt. Trotzdem können einzelne Punkte am Bildschirm überhaupt nicht leuchten oder ständig leuchten. Bei Betrachtung des Bildschirms aus einem spitzen Winkel können die Farben oder die Helligkeit unregelmäßig erscheinen. Bitte beachten Sie, dass es sich dabei um keine Qualitätsmängel handelt, sondern um allgemein bei LCD-Geräten auftretende Phänomene, welche die Leistung des Monitors in keiner Weise beeinträchtigen.
-) Lassen Sie niemals ein Standbild über längere Zeit hinweg anzeigen, da dies ein Nachleuchten am Bildschirm zur Folge haben könnte.
-) Vermeiden Sie es, den Monitor mit harten Gegenständen abzureiben oder zu berühren.
-) Wir bitten um Ihr Verständnis, dass eyevis über die gesetzlich anerkannte Leistungshaftung hinaus keine Haftung für Fehler übernimmt, die sich aus der Verwendung durch den Kunden oder einen Dritten ergeben, und auch nicht für sonstige Funktionsstörungen oder Schäden, die während der Verwendung am Gerät entstehen.
-) Eine Aktualisierung dieses Monitors und seines Zubehörs ist vorbehalten.
-) Verwenden Sie den Monitor nicht an Orten mit hoher Staubentwicklung, hoher Luftfeuchtigkeit oder an Orten, an denen der Monitor mit Öl oder Dampf in Kontakt kommen könnte, da dies zu einem Brand führen könnte.
-) Achten Sie darauf, dass der Monitor nicht mit Wasser oder anderen Flüssigkeiten in Berührung kommt. Achten Sie auch darauf, keine Gegenstände, wie z.B. Büroklammern oder sonstige spitze Gegenstände, in den Monitor zu stecken. Die Folge könnte ein Brand oder Stromschlag sein.
-) Stellen Sie den Monitor nicht auf instabile Gegenstände oder an andere unsichere Stellen. Setzen Sie den Monitor keinen starken Stößen oder Erschütterungen aus. Wenn der Monitor hinunterfällt oder umkippt, könnte er Schaden nehmen.
-) Stellen Sie den Monitor nicht in der Nähe von Heizungen oder an anderen Stellen auf, an denen hohe Temperaturen auftreten, da dies zu einer übermäßig starken Erhitzung mit der Folge eines Brandes führen könnte.
-) Stellen Sie den Monitor nicht an Orten auf, an denen er direktem Sonnenlicht ausgesetzt ist.



-) Bitte entfernen Sie regelmäßig Staub und Schmutz von der Belüftungsöffnung. Wenn sich Staub an der Belüftungsöffnung ansammeln, kann es zu einer Überhitzung des Geräts und in der Folge zu einem Brand oder zu Fehlfunktionen kommen.
-) Reinigen Sie das Innere des Monitors mindestens einmal jährlich. Wenn sich Staub im Inneren des Monitors ansammelt, kann es zu einer Überhitzung des Geräts und in der Folge zu einem Brand oder Fehlfunktionen kommen. Bitte lassen Sie das Innere des Monitors von einem autorisierten eyevis-Händler oder einem eyevis Servicecenter reinigen.
-) Bilder können auf diesem Monitor nicht gedreht werden. Wenn Sie den Monitor in vertikaler Ausrichtung verwenden, müssen Sie die Bilder zuvor entsprechend drehen.
-) Bitte achten Sie darauf, dass die Steckdose in der Nähe des Systems ist und leicht zugänglich ist. Das Netzkabel dient als eine Trennvorrichtung.

Das Netzkabel

-) Beschädigen Sie das Netzkabel nicht, stellen Sie keine schweren Gegenstände darauf, und überdehnen oder knicken Sie es nicht.
-) Verwenden Sie keine beschädigten Verlängerungskabel. Ein beschädigtes Kabel kann einen Brand oder Stromschlag verursachen.
-) Verwenden Sie nur das mit dem Monitor gelieferte Netzkabel.
-) Verwenden Sie das Netzkabel nicht mit einer Mehrfachsteckdose. Die Verwendung eines Verlängerungskabels kann aufgrund von Überhitzung zu einem Brand führen.
-) Achten Sie darauf, dass Sie beim Einstecken oder Ausstecken des Netzsteckers keine nassen Hände haben, um einen Elektroschlag zu vermeiden.
-) Ziehen Sie das Netzkabel aus der Steckdose, wenn Sie das Gerät längere Zeit über nicht verwenden.
-) Führen Sie keine Reparaturversuche an einem beschädigten oder nicht funktionstüchtigen Netzkabel durch. Überlassen Sie Reparaturarbeiten ausschließlich dem Kundendienst.



ACHTUNG

Dieses Gerät ist ein Produkt der Klasse A gemäß EN 55022: 2010. In Wohnräumen kann dieses Gerät Störsignale erzeugen, die durch entsprechende Abhilfemaßnahmen durch den Benutzer beseitigt werden müssen.

ACHTUNG

Verwenden Sie EMV-gerechte, abgeschirmte Kabel, um die folgenden Anschlüsse zu verbinden:

PC/AV DVI-D-Ausgangsanschluss, PC/AV DVI-D-Eingangsanschluss, PC/AV HDMI-Eingangsanschluss, PC D-sub-Eingangsanschluss, PCRGB-Eingangsanschlüsse und RS-232C-Eingangs-/Ausgangsanschlüsse.

↑ WARNUNG

Wenn ein Monitor nicht auf einer stabilen Unterlage aufgestellt wird, besteht die Gefahr, dass er kippt oder fällt. Zahlreiche Verletzungen, besonders bei Kindern, können durch einfache Vorsichtsmaßnahmen vermieden werden:

- Bei Verwendung der vom Hersteller empfohlenen Befestigungsvorrichtungen, wie z.B. Wandhaken.
- Stellen Sie den Monitor nur auf Möbelstücke, die ausreichend stark sind.
- Achten Sie darauf, dass der Monitor nicht über den Rand des Möbelstücks, auf dem er steht, vorsteht.
- Stellen Sie den Monitor niemals auf ein großes Möbelstück (z.B. einen Schrank oder in ein Bücherregal), ohne sowohl das
- Möbelstück als auch den Monitor an einem geeigneten Element sicher zu verankern.
- Stellen Sie den Monitor niemals auf ein Tuch oder andere Materialen, die zwischen dem Monitor und dem Möbelstück, auf dem er steht, liegen.
- Weisen Sie Kinder eindringlich darauf hin, dass es gefährlich ist, auf ein Möbelstück zu klettern, um an den Monitor oder seine Regler zu gelangen.

↑ WARNUNG

Wichtige Hinweise für die Sicherheit von Kindern

- Lassen Sie Kinder niemals auf den Monitor klettern oder am Monitor spielen.
- Stellen Sie den Monitor nicht auf Möbelstücke, die leicht als Stufen verwendet werden könnten, wie zum Beispiel eine Truhe oder Kommode.
- Bedenken Sie, dass Kinder bei Betrachtung eines Fernsehprogramms und ganz besonders bei einem "überlebensgroßen"
- Monitor in starke Aufregung verfallen können. Der Monitor sollte so aufgestellt werden, dass er nicht umgestoßen oder gekippt werden kann.
- Alle am Monitor angeschlossenen Kabel und Stränge sollten so verlegt werden, dass neugierige Kinder nicht daran ziehen oder sie ergreifen können.



À propos de ce Manuel

Lisez et suivez ces instructions. Ils contient des informations importantes sur le produit. Faites particulièrement attention à toutes les consignes de sécurité et aux avertissements.

Conservez ce manuel soigneusement!

Des symboles d'avertissement utilisés

ATTENTION

Indique un danger qui peut endommager ou détruire le produit.



Le symbole d'avertissement général indique un danger qui pourrait entraîner des blessures ou la mort. Dans le texte, le symbole d'avertissement général est utilisé en conjonction avec les niveaux d'alerte décrits ci-dessous.

⚠ PRÉCAUTION

Indique un danger qui pourrait provoquer des blessures mineures ou modérées.

AVERTISSEMENT

Indique un danger qui peut provoquer des blessures graves, voire mortelles.

$oldsymbol{\Lambda}$ danger

Indique un danger qui provoquer la mort ou des blessures graves.

Symboles utilisés

>	Désigne une action unique ou plusieurs d'actions, qui peuvent être executées dans un ordre quelconque.
1.	Signifie une série d'actions qui doivent être exécuteés dans l'ordre
2.	chronologique.
3.	



Sécurité

Précautions de sécurité

L'électricité remplit de nombreuses fonctions utiles, mais elle peut provoquer des blessures et des dégâts matériels si elle n'est pas utilisée correctement. Cet appareil a été conçu et fabriqué en attachant la plus grande importance à la sécurité. Cependant, une utilisation inadéquate peut entraîner une décharge électrique et/ou un incendie. Afin d'éviter tout danger potentiel, veuillez respecter les consignes suivantes lors de l'installation, de l'utilisation et du nettoyage de l'appareil. Afin d'assurer votre propre sécurité et de prolonger la durée de service de votre moniteur LCD, veuillez lire attentivement les précautions ci-dessous avant d'utiliser l'appareil.

-) Lisez ces explications Vous devez lire et comprendre toutes les informations relatives au fonctionnement de l'appareil avant de l'utiliser.
-) Conservez cette brochure dans un endroit sûr Ces explications concernant la sécurité et le fonctionnement doivent être conservées dans un endroit sûr pour vous y référer en cas de besoin.
-) Respectez les avertissements Tous les avertissements figurant sur l'appareil et dans ce mode d'emploi doivent être strictement respectés.
-) Suivez les instructions Toutes les explications sur le fonctionnement doivent être respectées.
-) Nettoyage Débranchez le cordon d'alimentation au niveau de la prise du secteur avant de nettoyer l'appareil. Servez-vous d'un linge sec, et n'employez pas de détergents liquides ou en atomiseur.
-) Accessoires N'utilisez pas d'accessoires non recommandés par le fabricant, car ceci pourrait provoquer des accidents.
-) Eau et humidité N'utilisez pas cet appareil près de l'eau. N'installez pas le produit à un endroit où il pourrait recevoir de l'eau. Évitez en particulier les emplacements sous les appareils à vidange d'eau tels que les climatiseurs.
-) Ventilation Des ouïes et autres ouvertures sont prévues dans le coffret de l'appareil pour sa ventilation. Ne recouvrez pas et ne bouchez pas ces ouvertures car une ventilation insuffisante peut provoquer une surchauffe et réduire la durée de vie de l'appareil. Ne placez pas l'appareil sur un sofa, un tapis ou toute autre surface analogue car ceci pourrait obstruer les ouvertures de ventilation. Cet appareil n'est pas conçu pour une installation encastrée; ne le placez donc pas dans un endroit fermé comme une bibliothèque ou une baie à moins qu'une ventilation adéquate ne soit prévue et que les consignes du fabricant ne soient respectées.
-) Protection du cordon d'alimentation Faites passer les cordons d'alimentation à un endroit où ils ne seront pas écrasés ou coincés par d'autres objets.
-) Le panneau de l'écran à cristaux liquides (LCD) de cet appareil est fabriqué en verre et, par conséquent, il peut se briser si l'appareil tombe ou s'il reçoit un fort impact. Veillez à ne pas vous blesser par les éclats de verre si le panneau LCD devait être brisé.
-) Surcharge Ne surchargez pas les prises de courant ou les rallonges car ceci peut entraîner un risque d'incendie ou d'électrocution.
-) Insertion de solides ou de liquides N'introduisez jamais des objets par les orifices de cet appareil, car ils pourraient provoquer une électrocution et/ou un court-circuit en touchant des pièces internes sous haute tension. Pour la même raison, ne renversez jamais de l'eau ou un liquide sur l'appareil.



-) Entretien N'essayez pas de réparer vous-même l'appareil. La dépose des couvercles peut vous exposer à une haute tension ou à d'autres dangers. Confiez toute réparation à un personnel qualifié.
-) Réparation Dans les cas suivants, débranchez le cordon d'alimentation au niveau de la prise secteur et demandez à un personnel qualifié d'effectuer les réparations.
- Dégât sur le cordon ou la prise de courant.
- Infiltration d'un liquide ou pénétration d'un objet à l'intérieur de l'appareil.
- Exposition de l'appareil à la pluie ou à l'eau.
- Fonctionnement anormal malgré une conformité aux explications du mode d'emploi. Ne réglez que les commandes dont il est fait mention dans le mode d'emploi. Un réglage incorrect des autres commandes peut provoquer des dégâts qui nécessiteraient des réparations complexes par un technicien spécialisé.
- Chute ou dégâts subis par l'appareil.
- Tout changement notoire ou situation anormale de l'appareil indique qu'une réparation est nécessaire.
-) Pièces de rechange Lorsque des pièces doivent être remplacées, assurezvous que le technicien a utilisé les pièces spécifiées par le fabricant ou des pièces dont les performances et les caractéristiques sont identiques. Des changements non autorisés de pièces peuvent entraîner un incendie, une électrocution et/ou d'autres dangers.
-) Contrôles de sécurité Après une intervention d'entretien ou de réparation, demandez au technicien de procéder à un contrôle pour être sûr que l'appareil peut être utilisé en toute sécurité.
-) Installation sur paroi Si l'appareil doit être fixé sur une paroi, installez-le en respectant la méthode recommandée par le fabricant.
-) Sources de chaleur Tenez l'appareil à l'écart de sources de chaleur, telles que radiateurs, dispositifs de chauffage, poêles et autres appareils dégageant de la chaleur (y compris les amplificateurs).
-) Piles Une utilisation incorrecte des piles peut les faire éclater ou prendre feu. Une pile qui fuit peut causer des corrosions dans l'équipement, des salissures aux mains ou abîmer vos vêtements. Afin d'éviter ces problèmes, assurez-vous que les précautions suivantes sont appliquées :
- Utilisez seulement des piles prescrites.
- Installez les piles en faisant bien attention aux polarités plus (+) et moins (-) des piles selon les instructions dans le compartiment.
- Ne mélangez pas des piles usagées avec des neuves.
- Ne mélangez pas des piles de différents types. Les spécifications de voltage des piles de même forme peuvent varier.
- Remplacez rapidement une pile épuisée par une nouvelle.
- Si vous n'avez pas l'intention d'utiliser la télécommande pendant une longue période, retirez les piles.
- Si le liquide provenant d'une pile qui fuit touche votre peau ou vos habits, rincez immédiatement et complètement les parties touchées. Si un oeil est touché, faites immédiatement un bain d'oeil plutôt que de le frotter et cherchez immédiatement un traitement médical. Le liquide provenant de la fuite d'une pile qui atteint votre oeil ou vos habits peut causer une irritation de la peau ou des dommages à votre oeil.
-) L'utilisation de ce moniteur ne doit pas entraîner des risques mortels ou des dangers qui pourraient provoquer directement la mort, des blessures sur le personnel, des dommages physiques sévères ou d'autres destructions, y



- compris dans le contrôle des réactions nucléaires dans les installations nucléaires, dans le système médical de réanimation, et dans le contrôle de lancement des missiles dans les systèmes d'armes.
-) N'entrez pas en contact direct avec les parties du produit ayant chauffé pendant de longues périodes. Il pourrait en résulter des brûlures à basse température.

Mesures de sécurité

-) Le panneau couleur LCD TFT utilisé dans ce moniteur est fabriqué en application d'une technologie de grande précision. Cependant, il peut avoir sur l'écran des points minuscules où les pixels ne s'allument jamais ou restent allumés en permanence. De même, si on regarde l'écran avec un angle aigu par rapport à la surface de l'écran, les couleurs et la luminosité peuvent paraître inégales. Notez que ce n'est pas un dysfonctionnement mais un phénomène commun des écrans LCD et que cela n'affectera pas les performances du moniteur.
-) N'affichez pas une image fixe pendant une longue période, car cela pourrait provoquer l'apparition d'une image rémanente.
-) Ne frottez pas, ne grattez pas le moniteur avec un objet dur.
-) Il faut savoir que la Eyevis décline toute responsabilité en cas d'erreurs commises durant l'utilisation par le client ou par une tierce personne, ainsi qu'en cas de dysfonctionnement ou de dommage survenu à ce produit pendant son utilisation, excepté dans le cas de responsabilité reconnue par la loi
-) Ce moniteur et ses accessoires sont susceptibles d'évoluer sans avis préalable.
-) N'utilisez pas le moniteur dans un endroit où il y a beaucoup de poussières, où le degré d'humidité est élevé, ou encore là où il pourrait se trouver en contact avec de l'huile ou de la vapeur, car cela pourrait provoquer un début d'incendie.
-) Assurez-vous que le moniteur ne se trouve pas en contact avec de l'eau ou d'autres fluides. Assurez-vous qu'aucun objet tel que des agrafes et des trombones ne pénètre dans le moniteur, car cela pourrait provoquer un début d'incendie ou un choc électrique.
-) N'installez pas le moniteur au dessus des objets instables ou dans des endroits peu sûrs. Faites attention que le moniteur ne reçoive pas de chocs violents ni de fortes vibrations. Provoquer la chute du moniteur ou le culbuter peut l'endommager.
-) N'utilisez pas le moniteur à proximité d'un appareil de chauffage ou dans des endroits où la température est élevée, car cela pourrait conduire à un dégagement excessif de chaleur et provoquer un début d'incendie.
-) N'utilisez pas le moniteur dans des endroits exposés directement à la lumière du soleil.
-) Veillez à nettoyer fréquemment la poussière et les débris accumulés sur les ouvertures de ventilation. L'accumulation de poussière sur les ouvertures de ventilation risque d'entraîner une surchauffe, un incendie ou un dysfonctionnement. Il est recommandé de nettoyer l'intérieur du moniteur une fois par an. L'accumulation de poussière à l'intérieur du moniteur risque d'entraîner une surchauffe, un incendie ou un dysfonctionnement. Faites nettoyer l'intérieur du moniteur par un revendeur Eyevis ou un centre de services autorisé.
-) Il n'est pas possible de faire tourner les images sur ce moniteur. Quand vous travaillez suivant la direction verticale, prévoyez d'orienter au préalable le contenu.



) Veuillez vous assurer que la prise est installée près du système et est facilement accessible. Le cordon d'alimentation est un dispositif de déconnexion.

Le cordon d'alimentation

-) N'endommagez pas le cordon d'alimentation, ne déposez pas d'objets lourds sur le cordon d'alimentation, ne tirez pas dessus et ne le pliez pas de manière excessive.
-) Ne pas utiliser de rallonges endommagées. Tout endommagement du cordon d'alimentation peut provoquer un début d'incendie ou un choc électrique.
-) Utilisez seulement le cordon d'alimentation fourni avec le moniteur.
-) Ne branchez pas le cordon d'alimentation sur une prise multiple. Ajouter une rallonge peut entraîner une surchauffe et provoquer un début d'incendie.
-) Ne débranchez pas ni ne branchez la prise d'alimentation avec des mains humides. En ce faisant, vous risquez un choc électrique.
-) Débranchez le cordon d'alimentation si l'équipement n'est pas utilisé pendant une longue période.
-) Ne tentez pas de réparer le cordon d'alimentation s'il est coupé ou s'il ne fonctionne pas correctement. Veuillez prendre contact avec le service après vente et suivre ses recommandations.



ATTENTION

Ce produit appartient à la Classe A d'après la norme EN 55022: 2010. Dans un environnement résidentiel, il peut provoquer des interférences radio et, dans ce cas, l'utilisateur peut être obligé de prendre les mesures nécessaires.

ATTENTION

Afin de satisfaire aux normes EMC, utiliser des câbles blindés pour connecter les bornes suivantes :

Borne de sortie PC/AV DVI-D, borne d'entrée PC/AV DVI-D, borne d'entrée PC/AV HDMI, borne d'entrée PC D-sub, bornes d'entrée PC RVB, et bornes d'entrée/sortie RS-232C.

AVERTISSEMENT

Un moniteur placé sur un support instable est dangereux en raison des risques de chute qu'il présente. De nombreuses blessures, touchant en particulier les enfants, peuvent être évitées en prenant quelques précautions simples :

- Utiliser les dispositifs de fixation tels que les supports muraux fournis par le fabricant.
- Utiliser uniquement des meubles capables d'accueillir le moniteur en toute sécurité.
- Vérifier que le moniteur ne dépasse pas du bord du meuble sur lequel il est posé.
- Ne pas placer le moniteur sur des meubles hauts, armoires ou étagères, par exemple, sans fixer le meuble concerné et le moniteur à un support approprié.
- Ne pas intercaler de tissu ou toute autre matière entre le moniteur et le meuble sur lequel il est posé.
- Expliquer aux enfants qu'il est dangereux de grimper sur les meubles pour atteindre le moniteur ou ses boutons de commande.

AVERTISSEMENT

En particulier pour la sécurité des enfants

- Ne laissez pas les enfants grimper sur ou jouer avec le moniteur.
- Ne placez pas le moniteur sur des meubles qui peuvent facilement se transformer en marches comme une commode avec tiroirs.
- Souvenez-vous que les enfants s'excitent souvent en visionnant un programme, surtout sur un moniteur « plus grand que la normale ». Il faut faire en sorte d'installer le moniteur là où il ne peut pas être poussé, tiré, ni basculé.
- Il faut faire en sorte de placer les fils et les câbles connectés au moniteur de façon à ce que des enfants curieux ne puissent pas les tirer ni les saisir.



Features

High-Resolution wide-screen panel

With a resolution of 1920 x 1080 pixels (Full HD) and 1.073 billion colours you can display extremely fine pictures with this TFT LCD display.

Input connection possibilities

- 1x HDMI
- 1x VGA
- 1x DVI-D
- 1x Display Port
- 1x RS232 (D-sub 9 pin)
- 1x Ethernet
- 1x Touch USB
- 2x USB 2.0
- 1x USB 3.0
- 1x PC Audio IN
- 1x Audio OUT
- 1x IR Extender

Optional eyevis EPU (eyevis Processing Unit)

eyevis EPU is an OPS-compliant media player powered by 4th generation Intel® Core™ processors. Yet, eyevis EPU has high scalability, allowing for easy storage capacity expansion through pluggable 2.5″ storage unit and effortless functional extension through Mini Card expansion modules. eyevis EPU leverages the 4th generation Intel® Core™ processors to deliver outstanding graphics whilst limiting the power usage.



EPU - Key features

- 4th generation Intel® Core™ i5-4400E processor family
- Intel® HD Graphics with DirectX 11.1 support
- Dual DDR3L SO-DIMM support
- Support for Intel® AMT9.0



Packaging

) NOTE:

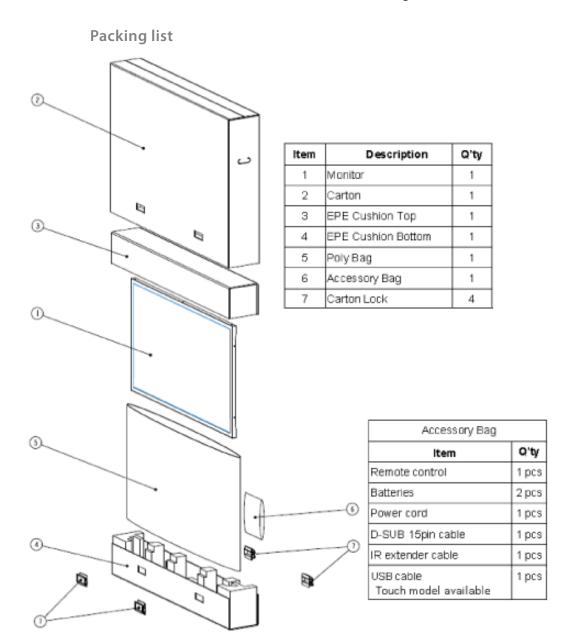
Please see chapter "Appendix: Package handling" on page 73.

Unpacking

The EYE-LCD-Series display is packed with EPE cushion to protect the device during shipping.

To unpack the device:

- 1. Before unpacking your device, prepare a stable, level, and clean surface near a wall outlet.
- 2. Place the LCD monitor box in an upright position and open from the top of the box to remove the cushion.
- 3. Remove the box handles.
- 4. Remove the foam and take out the accessories bag.





Box content

Item	Q'ty
Power cord	1
VGA cable (black)	1
IR Extender	1
Remote Control	1
Batteries (AAA, in remote control included)	2
USB cable (Touch model available)	1

Power Cord (black)



VGA Cable (D-Sub)



IR Extender



OSD Remote Control



USB Cable (included only with touch models)



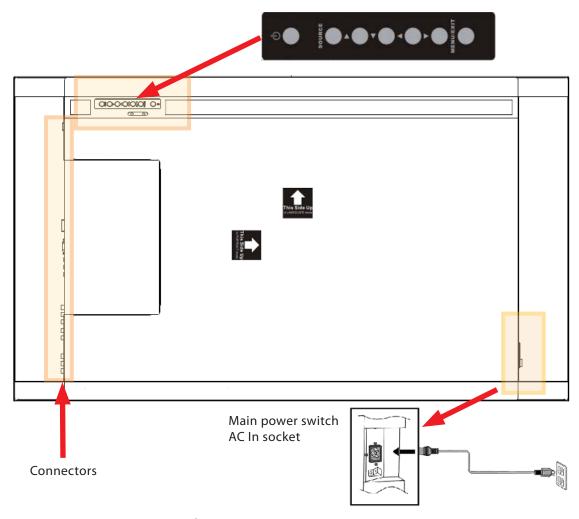


Connectors and Connections

Main power switch and AC inlet

The included power cord is used to connect the side controls of the LCD monitor and the wall outlet.

Connect the power cord into main power of the monitor, "I" is power ON, "O" is power OFF.

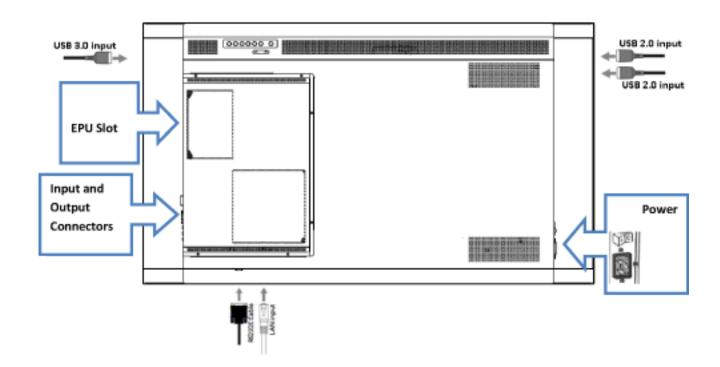


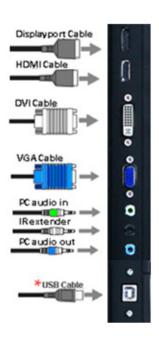
Power switches

- The main power switch located directly below the AC power inlet. Please see the chapter "Main power switch and AC inlet" above.
- The ON/OFF switch is the top button on the monitor keypad.
- The ON/OFF switch is also located on the remote control.



I/O connectors EYE-LCD-4600-OPS

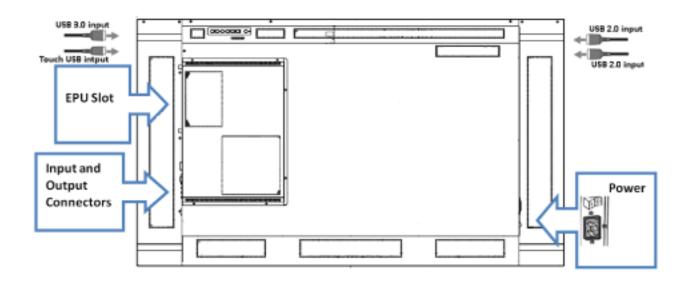


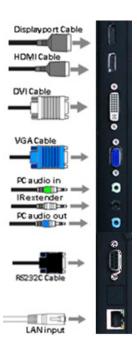


Name	Connector	Remarks
USB 3.0	USB 3.0	USB 3.0 input
USB 2.0 x2	USB 2.0	USB 2.0 input
EPU Slot	EPU	EPU module input
DisplayPort		
HDMI input		
DVI input		
VGA (PC) input	D-Sub 15 pin	Source input
PC audio In	Mini jack	
IR Extender	Mini jack	
PC audio Out	Mini jack	
TOUCH USB	USB	EYE-LCD-4600-OPS-TOUCH-6IR available only
RS232C input	D-Sub 9 pin	Communication port
LAN	RJ-45	Communication port
AC switch	ON/OFF	
Power cord input	AC input	



I/O connectors EYE-LCD-5500-OPS

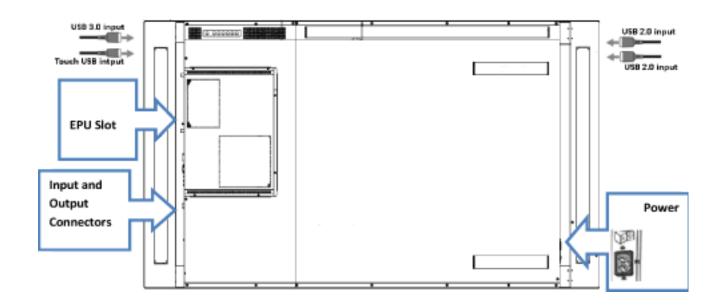


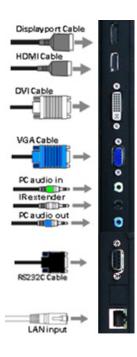


Name	Connector	Remarks
USB 3.0	USB 3.0	USB 3.0 input
TOUCH USB	USB	EYE-LCD-5500-OPS-TOUCH-6IR available only
USB 2.0 x2	USB 2.0	USB 2.0 input
EPU module input	EPU	EPU module input
DisplayPort		
HDMI input		
DVI input		
VGA (PC) input	D-Sub 15 pin	Source input
PC audio In	Mini jack	
IR Extender	Mini jack	
PC audio Out	Mini jack	
RS232C input	D-Sub 9 pin	Communication port
LAN	RJ-45	Communication port
AC switch	ON/OFF	
Power cord input	AC input	



I/O connectors EYE-LCD-6500-OPS





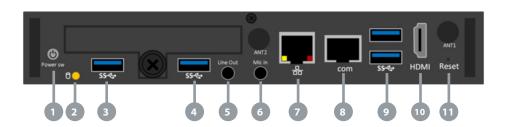
Name	Connector	Remarks
USB 3.0	USB 3.0	USB 3.0 input
USB 2.0 x2	USB 2.0	USB 2.0 input
EPU module input	EPU	EPU module input
DisplayPort		
HDMI input		
DVI input		
VGA (PC) input	D-Sub 15 pin	Source input
PC audio In	Mini jack	
IR Extender	Mini jack	
PC audio Out	Mini jack	
RS232C input	D-Sub 9 pin	Communication port
LAN	RJ-45	Communication port
AC switch	ON/OFF	
Power cord input	AC input	



EPU connections (optional)

) NOTE

 ${\it Please refer to the manual "eyeProcessing Unit-EPU" for more information.}$



1	Power switch	Turns the device on and off.
2	Hard disk LED	Shows if the hard disk is busy.
3	USB 3.0	Connector for USB devices (mouse, keyboard, stick)
4	USB 3.0	Connector for USB devices (mouse, keyboard, stick)
5	Line Out	3,5 mm jack connector plug for audio output.
6	Mic in	3,5 mm jack connector plug for audio input.
7	Ethernet	RJ45 plug for Ethernet.
8	COM	RS232 plug.
9	USB 3.0	Connectors for USB devices (mouse, keyboard, stick)
10	HDMI	HDMI connector for a second display.
11	Reset	Hardware reset. Use only if the system crashes.



Operating the display

Setup process

1. Plug in the power cable and turn on the main power switch (without turning on the signal source device(s)).



2. Plug in the signal source cables.



3. Then press the power key on the keypad of the display or the power key on the remote control to turn on the display.



4. Turn on the power of the signal source device(s) to begin sending signal to the display.





Turning display ON and OFF

Turning the display ON

- 1. Connect the display to an AC power outlet.
- 2. Power on by switching the main power switch to "I".
- 3. Press the power button on the remote control or keypad.

Turning the display OFF

If the display is switched on, press the power button on the remote control or keypad to put the display into standby mode. To turn off power completely, turn the main power switch to "O". Finally you can disconnect the power cord from the mains.

) NOTE:

If there is no signal input for a period of time, the display will automatically go into power saving (sleep) mode.

Adjusting volume and input source

Adjusting the volume

- 1. Using the remote control, press the **VOLUME-** to decrease or **VOLUME+** to increase the volume.
- 2. Press the **MUTE** button to temporarily turn off all sound. To restore the sound, press the **MUTE** button again.

Selecting the input source

- 1. Using the remote control, press the desired source button (VGA, HDMI1, HDMI2, DVI, DisplayPort, S-Video, Component)
- 2. Or press **SOURCE** on the display keypad, use the arrow buttons (▲ ▼) to navigate to the desired input source (VGA, HDMI, DVI, DisplayPort, etc.) and press **ENTER**.
- 3. If the display cannot find a source, a "No signal" message will appear.





OSD keypad function list



Basic functions of OSD keypad and remote control

Key	Description
Power	Standby button
Source	Source selection; Activate selection
>	Menu right / value increasing
•	Menu left / value decreasing
A	Menu up
▼	Menu down
Menu / Exit	Menu / exit selection

Power button functions of OSD keypad and remote control

Starting Status	Action	Ending State
Display OFF	short pressing	Display and EPU ^(*) ON
Display ON	short pressing	Display OFF
Display ON	long (>4 sec) pressing	Display OFF and EPU ^(*) shutdown

Power button functions of EPU^(*)

Pressing power button	Description
long pressing	EPU(*) force shutdown
short pressing	EPU ^(*) shutdown

) NOTE

- If the display and EPU is turned on by pressing the mains power switch, the EPU and the display returns to the previous state.
- The display and EPU are controlled separately via RS232 commands.

The LED status indication

Power Status	Condition
Green	Normal operation
Blinking Orange	No signal
Orange	Power saving
OFF	Power OFF
	AC OFF

) NOTE

If the LED is set to "OFF" in the OSD menu, the status LED will not operate.

^(*) optional accessory



Avoiding image retention

Fixed images displayed over a long periods of time may cause image "burn-in" or image retention. Image retention is not covered under warranty.

▶ Follow the recommendations below to avoid image retention.

Set IRFM (Image Retention Frame Motion) to ON

To avoiding image retention, we recommend to set the IRFM feature to "ON". This feature can be activated in the OSD (on screen display) under "Advanced Settings"/ "IRFM"/ "ON".

Operate display within its rated ambient environment

For more information, see "Prevention of undesirable effects" on page 61.

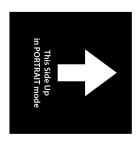
Avoid static content

For more information, see "Prevention of undesirable effects" on page 61.

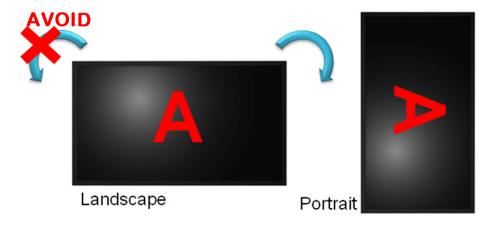
Rotating the display

When using the display in portrait position, the display should be rotated clockwise so that the left side is moved to the top (Do NOT rotate the display counter-clockwise or upside down). This will allow for proper ventilation for the display. Improper ventilation may shorten the lifetime of the display. After rotating the display, change the OSD rotation setting from "Landscape" to "Portrait" in the OSD menu.

Following labels indicates the rotation direction at the backside of the display.









NOTICE

Rotate the Display clockwise

Follow the direction label on the back of the display for the proper direction to rotate the display.



Installing Touch-Screen

In this section you will find all information about touch screen installation.

System requirements

EYE-LCD-4600/5500-OPS

Preferred:

• Processor: Quad Core 2.5 GHz or better

• Memory: 4 GB or more

• Graphic Card: DX 9.0 standalone VRAM: 512 MB or better

Minimum:

• Processor: Dual Core 2.5 GHz or better

• Memory: 2 GB or more

• Graphic Card: N/A

Operating System:

- Operating systems that support Multi-Touch:
 Windows 7 Home Premium, Windows 7 Ultimate, Windows 8.
- Operating systems that do not support Multi-Touch, but single touch only: Windows 7 Home Basic, Vista, 2003.



Connecting the touch screen

) NOTE:

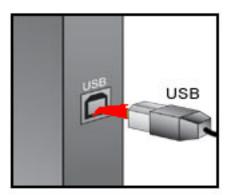
If an EPU is installed, the EPU will automatically be connected internally to the touch system.

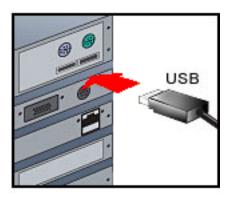
- ♦ No external cables are required.
- The external touch USB port will have no function.

Connecting cables and switching on

Connect the cables and switch on the power in the following order:

- 1. Connect the video cable from the computer to the display screen.
- 2. Connect power to the display screen and switch on.
- 3. Connect power to the computer and switch on.
- 4. Plug the power adaptor into a wall socket.
- 5. Connect overlay power adaptor into wall socket.
- **6.** Connect one side of a Type-B USB cable to the USB port on the monitor, as illustrated below.
- 7. Connect the other side of USB cable to the USB port on computer.





Monitor

PC

The computer then automatically detects the USB device (the touch frame) and, after a short pause, displays a series of messages on screen.





Installing the Multi-Touch software

) NOTE

The illustrations and certain descriptions of the software may vary due to development process.



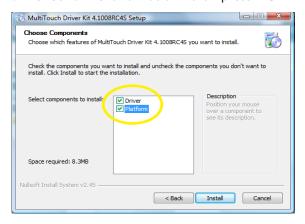
The True Multi-Touch touch screen requires drivers. Insert the attached Installation-CD into the dedicated PC's CD-ROM drive.

To start the software installation:

- 1. Run mt_driver_kit.exe.
- 2. Press **NEXT** > to continue.



3. Check Driver and Platform than press **INSTALL** to continue.

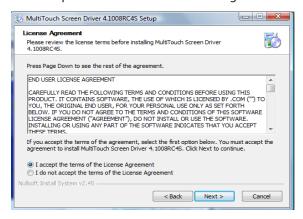


4. Press NEXT > to continue.

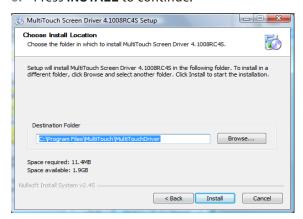




5. Accept the terms of the License Agreement then press **NEXT** > to continue.



6. Press INSTALL to continue.



7. Press on "INSTALL THIS DRIVER SOFTWARE ANYWAY" to continue.



8. Press FINISH to continue.



After installation a new icon appears in the Windows notification area.



Calibrating the touch screen

) NOTE:

Before operating the touch screen, you need to calibrate it.

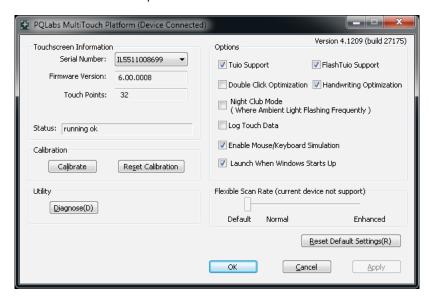
First close all applications so that you have a clear desktop with the normal mouse pointer showing.

To enter calibration mode:

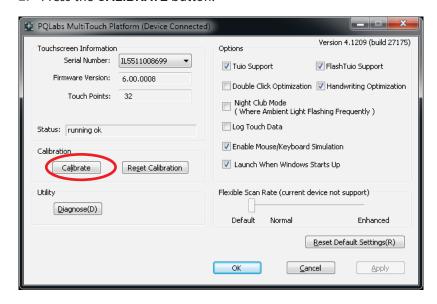
1. Double press icon in the Windows notification area.



♦ Main Window opens

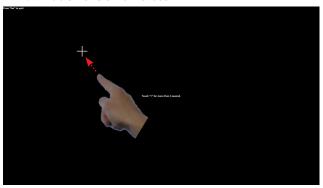


2. Press the CALIBRATE button.





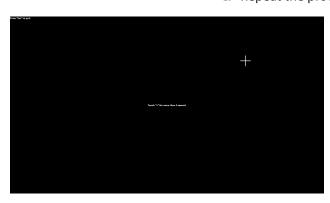
- 3. Touch the small cross on the screen until it becomes green, then lift your finger from the screen.
 - a. Touch the small cross
 - b. Remove your finger
 - c. Repeat the process at all quadrants.
- a. Touch the small cross

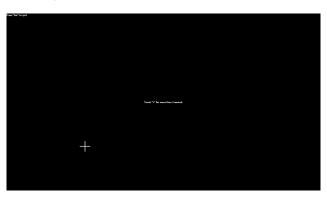


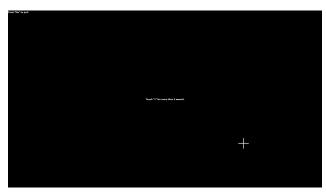
b. Remove your finger

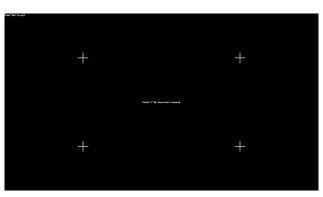


c. Repeat the process at all quadrants.









The calibration is finished. The calibration modus will switched off and the settings will saved on the PC automatically.

) TIP:

- ▶ If cross is still white, remove your finger and touch the screen again.
- ► When removing your finger, lift it straight off the screen, making sure you don't drag it across the screen.
- ▶ If it is still not working look into the manual chapter "Troubleshooting".



Controlling the display

The Remote Control (RC)

The menu functions of the OSD menu can be accessed with the eyevis Remote-Control (RC).

► To use the RC aim at the display's IR-Receiver.

Opening the On-Screen-Display (OSD)

▶ Press the MENU/EXIT button to open the OSD Menu on the screen.

Navigating in the OSD menu

- ▶ Use the arrow buttons ($\blacktriangleright/\blacktriangledown/\blacktriangleleft/\blacktriangle$) to navigate through the menu.
- Press the check mark button (\checkmark) to select a menu item.
- ► Press MENU/EXIT to abort the current operation and return to the previous menu.
- For numerical values you can either use the up/down arrow (▼/▲) to increase or decrease values or insert the values directly on the number block. If using the arrow buttons for entering numerical values, holding the keys pressed will toggle larger steps.
- You can use the **POWER** button to activate Standby mode.

Hot-Key: OSD menu lock/unlock

To lock the remote control or keypad:

- ► Press the sequence ENTER, ENTER, EXIT, EXIT, ENTER and EXIT on the IR-Controller.
 - ♦ The message "Key Locked" appears.

Key Locked

To unlock the remote control or keypad:

- ► Press the sequence ENTER, ENTER, EXIT, EXIT, ENTER and EXIT on the IR-Controller.
 - ♦ The message "Key Unlocked" appears.

Key Unlocked

Advanced power button function

For more information see chapter "Power button functions of OSD keypad and remote control" on page 31.







Overview remote control functions



1	ON/OFF	Turns the monitor ON/OFF
2	INFO	Provides source and resolution information
	VGA	Selects the PC RGB source
3	DVI	Selects the PC DVI source
	HDMI 1	Selects the HDMI 1 source
	COMP	Not available at this model.
4	AV (VIDEO)	Not available at this model.
	HDMI 2	Not available at this model.
	PIP position	Not available at this model.
5	DisplayPort	Select the DisplayPort source
	HD-SDI 1	Not available at this model.
	PIP	Turns the PIP feature ON/OFF
6	S-V	Not available at this model.
	HD-SDI 2	Not available at this model.
7	SWAP	Not available at this model.
8	P-SOURCE	Not available at this model.
9	MENU	Opens the monitor's on-screen menu system. When the menu system is already open, pressing this button will select the previous submenu
	▲ , ◄ , ▶ , ▼	Navigates through submenus and settings
10	EXIT	Closes the menu system
11	ENTER	Selects highlighted menu choices
	SCALING	Toggles between different aspect ratios (Full Screen, Native, Letter Box and Pillar Box)
	FREEZE	Not available at this model.
	MUTE	Turns off the sound
	BRIGHT	Adjusts the brightness
12	CONTRAST	Adjusts the contrast
	AUTO	Auto adjustment VGA source
	SOURCE	Allows selection of the different sources
	VOLUME-	Decreases the sound volume
	VOLUME+	Increases the sound volume

) NOTE:

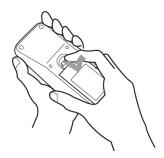
The remote control is powered by two 1.5V AAA batteries



Changing the remote control batteries

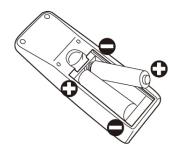
) NOTE:

The pictures are for illustration purposes and may differ from the originals.



Remove the battery cover

Slide back and remove the battery cover in the direction of the arrow



Insert the batteries

Align and insert two AAA batteries according to their plus and minus ports (as indicated on the button of the battery case of the remote control).



Close the battery cover

Replace the battery cover in the direction of the arrow and snap it back into place.

) NOTE:

3

Used batteries needed to follow the city rule to be discarded.

NOTICE

About the remote control

- Don't drop, shake or bump.
- Don't place on wet materials.
- Don't dismantle.
- Don't place in locations with high-temperature or high-humidity levels.
- Avoid keeping used, old batteries inside the remote control, causing leakage of internal liquid resulting metal rust or fatal damage to the remote control hand unit.

A CAUTION

Danger of explosion

Incorrect use of batteries may cause the batteries to explode or to ignite.



Using the menus

Navigating through the menu system

- ► The Image Settings menu will display by pressing the **MENU** button.
- ▶ Use \blacktriangle , \blacktriangledown , \blacktriangleleft , \blacktriangleright and **ENTER** to navigate through the menus and adjust options.
- Press MENU to return to the previous menu.
- To exit the menu system, press the **EXIT** button.

On-Screen-Display (OSD) overview

) NOTE:

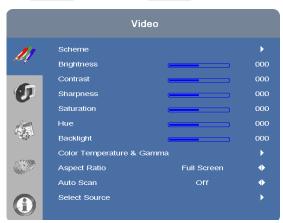
The user interface of the OSD menu depends on the version of the firmware. The appearance may vary but the functions are still available.



Video menu

This menu is used for making common image adjustments.





	Scheme	Selects a predefined preset of image adjustment. Press ◀ or ▶ to select the desired option and then press ENTER. Options: User, Vivid, Cinema, Game, Sport (Default: User)
	Brightness	Increases or decreases the brightness of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (Default: 50)
	Contrast	Increases or decreases the contrast of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (Default: 50)
	Sharpness	Increases or decreases the sharpness of the image. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-24 (Default: 10)
	Saturation	Adjusts the brilliance and brightness of colour (only Video Mode). Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (Default: 50)
Video	Hue	Increases or decreases the green hue (Only Video Mode). Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (Default: 50)
	Backlight	Increases or decreases the back light level. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (Default: 80)
	Color Temperature and Gamma	Adjusts red, green, blue gain and red, green blue offset. Press ▶ or ENTER to enter the menu.
	Aspect Ratio	Selects a predefined preset of image adjustment. Press ◀ or ▶ to select one of the following options: Options: Full Screen, Pillar Box, Auto (Default: Full Screen)
	Auto Scan	Scans the input source sequently. Press ◀ or ▶ to enable or disable the function. Options: On, Off (Default: Off)
	Select Source	Selects the Input Source. Press ◀ or ▶ to select one of the following options: Options: DisplayPort, HDMI, DVI, VGA (Default: VGA)



Video menu (continued)





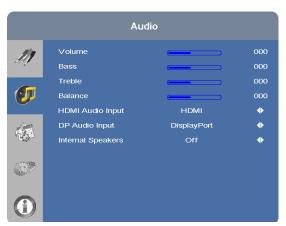
	Color Temperature and Gamma	Gamma	Selects the Gamma function. Press ◀ or ▶ to enable or disable the function. Options: Off, 2.2 (Default: 2.2)
		Color Temp	Adjusts the colour temperature of the image. Press ◀ or ▶, select the desired temperature and then press ENTER. Options: User, 5000K, 6500K, 7500K and 9300K (Default: 9300K)
		Red Gain	Set Colour Temperature to "User Mode" in order to adjust this setting. Adjusts the red gain of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: 128-384 (Default: 256)
0		Green Gain	Set Colour Temperature to "User Mode" in order to adjust this setting. Adjusts the green gain of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: 128-384(Default: 256)
Video		Blue Gain	Set Colour Temperature to "User Mode" in order to adjust this setting. Adjusts the blue gain of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: 128-384 (Default: 256)
		Red Offset	Set Colour Temperature to "User Mode" in order to adjust this setting. Adjusts the red offset of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: -50-50 (Default: 0)
		Green Offset	Set Colour Temperature to "User Mode" in order to adjust this setting. Adjusts the green offset of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: -50-50 (Default: 0)
		Blue Offset	Set Colour Temperature to "User Mode" in order to adjust this setting. Adjusts the blue offset of image. Press ◀ or ▶, select the desired level and then press ENTER. Range: -50-50 (Default: 0)



Audio menu

This menu is used for adjusting volume settings.





Audio	Volume	Adjusts the sound. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (Default: 50)	
	Bass	Adjusts the sound in low tones (bass). Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-20 (Default: 10)	
	Adjusts the high tones (treble). Treble Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-20 (Default: 10)		
	Balance	Adjusts the balance of the left and right speakers. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-20 (Default: 10)	
	HDMI Audio Input	Selects HDMI audio input mode. Press ◀ or ▶, select the desired option and then press ENTER. Option: HDMI, Extern (Default: HDMI)	
	DisplayPort Audio Input	Selects DisplayPort input mode. Press ◀ or ▶, select the desired option and then press ENTER. Option: DisplayPort, Extern (Default: DisplayPort)	
	Internal Speaker	Selects the internal speaker mode. Press ◀ or ▶, to switch internal speaker ON/OFF and then press ENTER. Option: ON, OFF (Default: ON)	



Basic menu

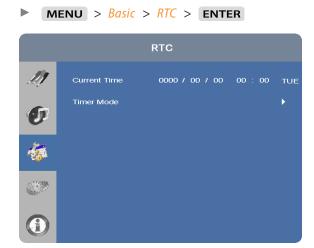
This menu is used to make initial set-up adjustments to the OSD (On-Screen Display) menu and other On-Screen messages.





Basic Settings	OSD Transparent	Adjusts the menu transparency. Press ◀ or ▶ to select the desired level and then press ENTER. Range: 0-12 (Default: 0)
	OSD Location	Selects the menu location on the monitor. Press ◀ or ► to select the desired position and then press ENTER. Options: (Up, Down, Left, Right).
	OSD Rotation	Selects the OSD Rotation. Press ◀ or ▶ select the rotation. Options: Landscape, Portrait (Default: Landscape)
	OSD Language	Selects the menu language. Press ◀ or ► to select the desired language and then press ENTER. Options: English and German (Default: English)
	OSD Timeout	Selects a period of time after which the OSD will switch to off. Press ◀ or ► to select the desired time limit. Options: 5-120 sec (Default: 30 sec)
	Power LED	Selects a period of time after which the monitor will switch to standby mode automatically. Press ◀ or ▶ to select the desired time limit. Options: Off, 15, 30, 45, 60, 90, 120 Min (Default: Off)
	Real Time Clock	Selects date and time, switch alarm on and off. Press ▶ or ENTER to enter the submenu.

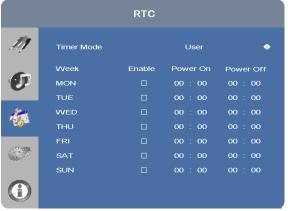




Settings	TC	Current Time		Current time setting Year / Month / Date, Hour: Minutes
Basic S	&	Timer Mode	•	Selects the timer mode. Press ► or ENTER to enter the submenu.







Basic Settings RTC

Timer Mode

User

Enable or disable the power on/off timer and specify the on/off times for each day of the week.

Press ◀ or ▶ to adjust the desired option and then press **ENTER**.

For each day of the week, you have the following options:

Enable or Disable the schedule of the day. *

Options: Disable, Enable (Default: Disable)







Basic Settings

Timer Mode

RTC

Work Days

Enable or disable the power on/off timer and specify the on/off times for work days and individual weekend days.

Press ◀ or ▶ to adjust the desired option and then press **ENTER**.

For Monday-Friday, Saturday or Sunday, you have the following options:

Enable or Disable the schedule of the work days or individual weekend days.

Options: Disable, Enable (Default: Disable)







Basic Settings
Timer Mode
RTC
RTC

Enable or disable the power on/off timer and specify the on/off times for all days.

Press ◀ or ▶ to specify the desired time for turning on/off and then press **ENTER**.

For all days, you have the following options:

Enable or Disable the schedule for all days of the week. *

Options: Disable, Enable (Default: Disable)



Advanced menu

This menu is used for adjusting advanced settings.





	Auto Adjustment	Forces the monitor to reacquire and lock to the input signal if the signal quality is marginal. Press ▶ or ENTER to start the auto adjustment. Note: This feature does not continually reacquire the signal. Options: No, Yes (Default: No)
	Image Position	Adjusts the image location (Only VGA Mode). Press ◀ or ▶, select the desired option and then press ENTER. Options: Up, Down, Left, Right
	Phase	Phase improves focus, clarity and image stability (Only VGA Mode). Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-63 (only VGA mode)
	Clocks	The image is wider or narrower by increasing or decreasing this setting. Press ◀ or ▶, select the desired level and then press ENTER. Range: 0-100 (only VGA mode)
Advanced	IRFM (Image Retention Frame Motion)	Creates slight frame motion to help reducing the risk of image retention. Press ◀ or ▶, select the desired option and then press ENTER. Options: On, Off (Default: Off)
	Baud Rate	Selects the baud rate and enables more functions for touch displays. (see Chapter "Functions of the "Baud Rate" setting" on page 54) Press ◀ or ▶, select the desired level and then press ENTER. Options: 115200, 38400, 19200, 9600 (Default: 115200)
	Smart light control	Selects the smart light control mode. Press ◀ or ▶, select the desired option and then press ENTER. Options: Off, DCR, Light Sensor (Default: Off)
	Wake Up From Sleep	Selects the weak up from sleep mode. Press ◀ or ▶, select the desired option and then press ENTER. Options: VGA Only, VGA, Digital, RS232 (Default: VGA Only)
	Ethernet Setup	Enables or disables ethernet function, more detail see next page. Press ▶ or ENTER to enter the submenu.
	Factory Reset	Restores all settings to their default. Press ◀ or ▶, select the desired option and then press ENTER. Options: No, Yes (Default: No)



Advanced menu (Ethernet Control)

► MENU > Advanced > Ethernet control > ENTER





	Enable Network	Enables or disables the network feature. Press ◀ or ▶ to enable or disable the network and then press ENTER. Options: No, Yes (Default: No)
	Dynamic IP	Enables or disables the Dynamic IP mode. Press ◀ or ▶ to enable or disable the dynamic IP mode and then press ENTER. Options: Disable, Enable (Default: Disable)
	Static IP Address	Adjusts static IP address. Press ► to select the next number of the IP address. Press ▼ or ▲ to select the desired number. Press ENTER to set the entered IP address. Range: 0-255.0-255. 0-255. 0-255
dr	Subnet Mask	Adjusts subnet mask. Press ► to select the next number of the subnet mask. Press ▼ or ▲ to select the desired number. Press ENTER to set the entered subnet mask. Range: 0-255.0-255. 0-255. 0-255
Ethernet Setup	Gateway	Adjusts gateway address. Press ► to select the next number of the gateway address. Press ▼ or ▲ to select the desired number. Press ENTER to set the entered gateway address. Range: 0-255.0-255. 0-255.
	DNS Address	Adjusts DNS address. Press ► to select the next number of the DNS address. Press ▼ or ▲ to select the desired number. Press ENTER to set the entered DNS address. Range: 0-255.0-255. 0-255. 0-255
	Save Network Settings	Update the IP settings to net device. Press ◀ or ► to switch ON/OFF and then press ENTER. Options: No, Yes Default: No
	Load Default Settings	Load default network settings. Press ◀ or ▶ to switch ON/OFF and then press ENTER. Options: No, Yes Default: No
	Device MAC	Shows MAC Info (only read)

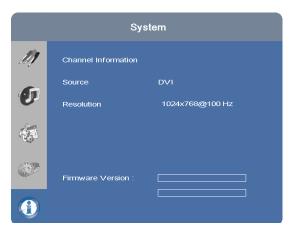
Advanced Settings



System Status menu

This read-only menu provides information on the active sources and the installed firmware version.



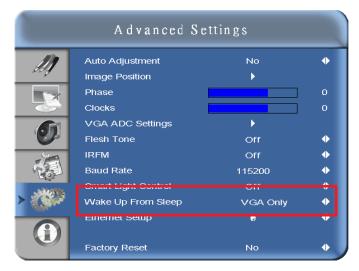


Wake Up from Sleep (WOD)

By default, the display will enter power saving (Sleep Mode) if no signal is received for 5 minutes. Normally, the RS232, DisplayPort, HDMI and DVI inputs are inactive in Sleep Mode, to save power.

To change the behaviour of Sleep Mode, change the "Wake up from Sleep" setting in the "Advanced" menu.

- 1. VGA Only (default) The RS232, DisplayPort, HDMI and DVI inputs are inactive when the display is in sleep mode. The display will wake up when it receives a signal at the VGA input
- 2. VGA, Digital, RS232 The RS232, DisplayPort, HDMI and DVI input stays active when the display is in sleep mode. The display will wake up when it receives a signal at the VGA, DisplayPort, HDMI, or DVI input





Functions of the "Baud Rate" setting

The "Baud Rate" setting has more functions than adjusting the baud rate of the display. Depending on the display version, following functions exists:

► MENU > Advanced > ENTER



Display without installed EPU

The setting "Baud Rate" adjusts the baud rate of the external RS232 control device (e.g. Laptop, PC..) if no EPU is installed. Proceed as follows:

To chance the baud rate:

▶ Press ◀ or ▶ to select the desired baud rate and then press **ENTER**.

) NOTE:

After adjusting the "Baud Rate", the baud rate of the RS232 communication device must be changed for controlling the display, too.

Display with installed EPU

If an EPU is installed, the "Baud Rate" adjusts the baud rate of the external RS232 control device or of the EPU and also switches the RS232 communication between the EPU and an external device (e.g. Laptop, PC..). "Baud Rate" contains a submenu with the settings for the baud rate and the setting "UART Port" for switching between EPU and external device. Proceed as follows:

To switch the RS232 communication to EPU/Extern:

- ▶ Press ▶ to enter the submenu of "Baud Rate".
- Press ◀ or ► to switch the option EPU/Extern and then press ENTER.

Touch-Display with installed EPU

If an EPU is installed in Touch-Display, the "Baud Rate" adjusts the baud rate of the external RS232 control device. The Touch-Frame can be used to control the EPU or any other external device (e.g. Laptop, PC..).

The control of the EPU or an external device can be switched with the setting "UART Port" in the submenu of "Baud Rate".

To control the EPU by the Touch-Frame select EPU in the "UART Port". Proceed as follows:



To control the EPU:

- ▶ Press ▶ to enter the submenu of "Baud Rate".
- Press ✓ or ► to switch the option to EPU and then press ENTER.

) NOTE:

If you want to control an external device by the Touch-Frame, connect the external device to the USB connector of the display and set the baud rate to "Extern".

To control an external device:

- Connect the external device to the USB connector of the display.
- ▶ Press ▶ to enter the submenu of "Baud Rate".
- Press ✓ or ► to switch the option to EPU and then press ENTER.

) TIP:

Normally Touch-Displays can be controlled via RS232 only by an external device (e.g. Laptop, PC..). If you want to control the display via EPU, you must connect the EPU to the touch frame with a USB to RS232 adapter outside.



Controlling one or several displays via RS232

Overview

All display functions that can be controlled using the on-screen display (OSD) and can also be controlled via the display's RS232 serial interface. The display can also be turned on and off using the RS232 interface.

For more information see chapter "Appendix: RS232 Protocol" on page 77.



Troubleshooting Guide

Before calling service personnel, please check the following chart for a possible cause of the trouble you are experiencing.

Symptom	Check these things
No picture	 Make sure the power cord is plugged in Maybe the power is OFF or Standby Check whether the auxiliary equipment is connected properly Check if the input setting is correct Signal may not be suitable
The remote control does not operate	 Make sure the batteries are inserted matching the + and - marks of the battery compartment The batteries may be exhausted Use the remote control aiming at the remote control sensor
The picture colour is pale, or not clear	 Check the picture quality adjustment Make sure cables are connected correctly
(Touch screen) Touch screen does not respond to touches	 Make sure the communications cable (USB) is connected to the computer and to the touch overlay. Make sure the touch screen is connected to a USB port that provides enough power for it (some peripherals, such as keyboards, include USB ports that do not provide sufficient power for certain devices). Try connecting the touch screen to a different USB port on the computer.
(Touch screen) Cursor does not accurately follow your finger	• This can occur if the touch overlay has not been calibrated correctly. To fix the problem, re-calibrate the touch overlay—see "Calibrating the Touch Screen".
(Touch screen) Unable to calibrate the touch frame	If you have a problem with calibrating the touch frame, contact your eyevis support provider for assistance.
(Touch screen) Unable to calibrate the touch frame after operating system update	If you have a problem with calibrating the touch frame after updating the operating system, contact your eyevis support provider for assistance.
(Touch screen) The cursor moves erratically	 Make sure there is nothing blocking the LEDs of the touch screen. Clean the glass and edges of the screen.
(EPU) No touch function with external computer	 If an EPU is installed, the external USB touch connector will not function. Remove the EPU to use the external touch USB port



Malfunction or trouble

A CAUTION

Smoke or peculiar smells

If the unit is still used in this condition, it may cause a fire or an electric shock.

- Immediately remove the power plug from the outlet.
- ► Make sure that the smoke or smell has stopped, then contact your dealer for inspection. .

\triangle CAUTION

Liquids or objects inside the device

If you continue to use the device after water, other fluids or objects have been spilled or dropped, this may cause a fire or an electric shock.

- Immediately remove the power plug from the outlet.
- Contact your dealer for inspection.

\triangle CAUTION

Damage caused by dropping the device

If you continue to use the device after it has been dropped or the housing has been damaged, it may cause a fire or an electric shock.

- Immediately remove the power plug from the outlet.
- Contact your dealer for inspection.

A CAUTION

Damaged or hot power cable

If you continue to use the device even though the power cable is damaged or becomes hot, it may cause a fire or an electric shock.

- Immediately remove the power plug from the outlet.
- Contact your dealer for inspection.



Compliance

FCC:

FCC CFR Title 47 Part 15 Subpart B Class A, CISPR 22 ANSI C63.4 ICES-003 Issue 5

CE:

EN 55022 EN 55024 EN 61000-3-2 EN 61000-3-3

cTUVus:

UL 60950-1 CAN/CSA-C22.2 No. 60950-1-07

CB:

IEC 60950-1



Effects in continuous operation of LCDs

False installation or use of the display during operating time may bring undesirable partly visible effects. The internal structure of LCD panel may be changed by outside influences with partly visible effects.

Image Sticking

This phenomenon which named alternatively "image retention", "ghost image", "memory effect" or "remanent image" appears if the fluid crystals of the panel depart from the initial position. This undesired effect may occur if same content is showed continually for long time and thereafter the content changes. Then possibly old content is still visible as "shade". These effects are wear marks, which may be intensified by unsuitable usage. It is not a defect! Image Sticking must not mixed up with "Burn-in", which is a known fact of plasma displays and cathode ray tubes and is based on completely different physical mechanisms. Heavy "Image Sticking" may be reversed by long switch off of the LCD/TFT displays.

Image Sticking of TFT panels is excluded from the warranty.

Mura

Further effect is Mura (a Japanese term for unevenness), which is visible as cloud formation. These clouds are particularly visible at low brightness. The most probably for the occurrence of Mura is operating the system in wrong temperature specifications. These may be caused by to high ambient temperature as well as poor air supply caused by inconvenient installation or polluted ventilation system.

Mura of TFT panels is excluded from the warranty.

Shade formation

Dust particle may build up inside the panel caused by high ambient pollution level. These particles climb up in the panel. This effect starts mostly in corners of the rim through the different layers by convention and capillary formation. These pollutions may be reversed by resolving and cleaning of the panel components in our clean room.

Shade formation of TFT panels by pollution is excluded from the warranty.



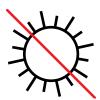
Prevention of undesirable effects



NOTICE!

Reduce ambient temperature

- Operate the device at an ambient temperature of max. 25°C.
- Ensure that the ventilation slots of the display are not covered or polluted by dust.



ACHTUNG!

Avoid direct sunlight

This extends the life-time of the display an reduce the risk of undesirable

Do not install or store the device in places with direct sunlight or near heat sources.



ACHTUNG!

Operating time of device

The operating time should not be longer than 20 hours a day. The display should be switched off for 4 hours. This extends the life-time of the display and reduce the risk of undesirable effects.

Switch off or turning the device to Stand-by-mode for 4 hours.

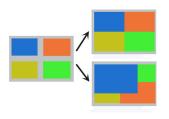


NOTICE!

Avoiding static images

Static images increase the risk of undesirable effects.

Activate a screen saver on the computer for these signals if they do not have to be surveyed as long as they do not change their content (e.g. logos, pictograms...).



NOTICE!

Scaling of the input signals

Avoid the static black borders on the screen.

► Scale up signals, that do not have the same native aspect ratio as the display, to use the entire screen area.

For example, a 4:3 image signal should be scaled up to 16:9 format to fill the complete screen.





half brightness

NOTICE!

Reduce the display brightness to 50 %

The reduced brightness enlarges the life-time of the display and allows later readjustments of the brightness level.

Operate the device with brightness to 50% if possible.

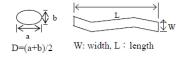


Evaluation of visual range

Pollutions

By the production process and handling of the displays occurs kinds of pollution in range of vision. It applies to inclusions, blistering, depressions, marks, scratches. The following tolerance limits is specified for bonded glass surfaces and optional touch surfaces:

Tolerance limits for bonded glass surfaces



Kind of pollution	Critical value
Inclusions / Marks	0,5 < D ≤ 1,2 mm, N ≤ 16
Depressions / Blistering	0,3 < D ≤ 1,2 mm, N ≤ 16
Scratch / Lints	$0.15 < W \le 0.25 \text{ mm}, \ 0.3 < L \le 10.0 \text{ mm}, \ N \le 10$

Tab. 1: Critical values of pollutions for bonded glass surfaces

Tolerance limits for optional touch surfaces

Pollution Category	Critical value
Inclusions / Marks	D ≤ 1,5 mm
Depressions / Blistering	D ≤ 1,5 mm
Scratch / Lints	W ≤ 0,25 mm, L ≤ 15,0 mm

Tab. 2: Critical values of pollution for touch surfaces

Acceptable total number [G] of defects	Critical value
Panel size to 55"	N ≤ 8, G ≤ 12
Panel size from 56" to 65"	N ≤ 9, G ≤ 14
Panel size from 66" to 70"	N ≤ 11, G ≤ 15
Panel size from 71" to 82"	N ≤ 14, G ≤ 18
Panel size from 83" to 110"	N ≤ 16, G ≤ 24

Tab. 3: Acceptable total number of defects for touch surfaces

D = diameter, L = length, W = width, N = number of pollution of a category , G = total number of mechanical defects or surface pollutions

Failure of pixel

A image point (Pixel) consist of 3 sub pixel with basic colour red, green and blue. The physical dimension of a pixel (also called pixel pitch) differs depending on the model (look at the data sheet for more information). If a pixel failure is larger than 1/2 pixel, it counts as pixel failure according to definition. 3 kinds of pixel failures are differentiated:

- Permanently bright pixel.
 The bright pixel is permanently and with constant size at black testing image.
- Permanent dark pixel.
 The pixel appears permanently dark and constant size at red, green and blue testing image.
- Two pixels lying next to each other.
 Two directly bordering pixels shows a defect.









For more information about acceptable number of dot defects according to ISO 9241 for Class II, see chapter "Overview acceptable total number of dot defects" on page 63



Overview acceptable total number of dot defects

Isolated pixel errors can not be eliminated for production reasons. The standard ISO 9241-307 specify the acceptable total number of dot defects for class II panels. You can see the tolerance limits in the following table:

Acceptable total number of dot defects according to ISO 9241-307 for class II panels (in relation to the resolution)

	Defect type 1	Defect type 2	Defect	type 3
Resolution	Bright dot	Black dot	Defect bright subpixel Total = 5-n* n* = 0[511]	Defect black subpixel Total = 2xn* n* = 0[511]
1 million pixel	2	2	5 5-n* 0	0 2xn* 10
XGA 1024 x 768 (0.786 million pixel)	2	2	4 4-n* 0	0 2xn* 8
SXGA 1280 x 1024 (1.310 million pixel)	3	3	7 7-n* 0	0 2xn* 14
WXGA 1366 x 768 (1.049 million pixel)	3	3	6 6-n* 0	0 2xn* 12
WXGA+ 1440 x 900 (1.296 million pixel)	3	3	7 7-n* 0	0 2xn* 14
HD 1920 x 1080 (2.073 million pixel)	5	5	11 11-n* 0	0 2xn* 22

Example: Total number of defect subpixel (In relation to 1 million pixel)

Number of bright subpixel n = 4, then are only 2 black subpixel allowed (see on right side)

→ 4 bright subpixel + 2 black subpixel

- 5 bright subpixel + 0 black subpixel
- 4 bright subpixel + 2 black subpixel
- 3 bright subpixel + 4 black subpixel
- 2 bright subpixel + 6 black subpixel
- 1 bright subpixel + 8 black subpixel
- 0 bright subpixel +10 black subpixel

Tab. 4: Acceptable total number of defects (ISO9241-307)



Warranty terms and conditions

Duration and validity of warranty

The specified product is under warranty for 24 months beginning from the date of delivery by eyevis, valid for the European Union. 12 months applies to products that were purchased outside the European Union. Warranty services during the warranty period do not extend the validity period of the warranty.

Proof of purchase

The sales agreement or the invoice (original invoice with serial number) of the first purchaser must be presented as proof of purchase to claim warranty services. If the customer cannot provide this evidence of purchase, the warranty period is dated back to the date of purchase at the distributor (first supplier) plus one month.

Warranty service or exchange during warranty period

If the product shows any faults or defects during the warranty period, eyevis provides the following services in compliance with the warranty:

Defective On Arrival (DOA)

The customer has to inspect each delivery immediately upon receipt. If any packaging is damaged, the customer has to notify his carrier immediately at goods receiving. If a defect is detected at first unpacking (packaging is not damaged), the customer has to notify his specialist supplier (point of purchase) immediately about the defect. Otherwise the product will be treated under usual terms of warranty.

Return-to-Base-Warranty (Bring-In Warranty)

Defective parts or products must be sent back carriage free to eyevis. In certain circumstances, the product can sent back to the specialist supplier (place of purchase) or to eyevis service center (country of purchase).

If the product requires repair under warranty, the customer is responsible for the cost of transportation to eyevis. Eyevis bears only the one-way costs for the reshipment of repaired or exchanged products to the customer. During transit, the goods are at the owner's risk.

Repair and return

The defective product has to be sent to eyevis by the customer and is repaired within 21 days. In this case, eyevis bears the costs for required components that may be required or the arising working time, as well as for the costs for reshipment to the customer.

Temporary exchange equipment during repair time

(only products under warranty)

Bring-in warranty. The customer can request a temporary exchange product during the repair time if the product under warranty cannot be repaired within 30 days. Depending on availability, eyevis decides whether the equipment can be replaced. Any costs of a return delivery for the exchange equipment are borne by the customer.



Warranty on repairs

As a general rule, repairs or replacements do not extend or restart the warranty period. The repaired parts/components will be treated under warranty for 3 months for same kind of problems.

Warranty exclusions

General exclusions

This warranty covers only malfunction due to any defect in material and/or workmanship of a product put into circulation by the eyevis . A guarantee is therefore excluded for any faults and defects beyond the responsibility of the eyevis , particularly in cases of:

- Improper use, mechanical damages (e.g. marks caused by scratching, pressure or breaking), improper storing or cleaning, transport damages, misuse, or any other reason the customer or a third party is to blame for, especially if the instructions contained in the manual are not adhered to.
- Display damages caused by the permanent representation of static images (or partially static images).
- Failures or fluctuations of the electrical mains supply, the air conditioning system, or other environmental conditions.
- Abnormal operating conditions, including smoke (e.g. cigarette smoke) and dust.
- Defects caused by normal wear and tear or defects caused by lack of service and maintenance (e.g. cleaning the filter).
- Act of God, fire, flood, aggressive chemical, aggressive biological activity, event of war, vandalism, accidents, etc.
- Errors of all kinds of using defective or incompatible accessories. (Not including components delivered from eyevis which are covered by the product's warranty).
- Attempted repair, setting, change, installation, or maintenance by a person not authorized by eyevis .

"Image Sticking" (memory) effect and "Mura"

see chapter "Effects in continuous operation of LCDs" on page 60

Failure of pixel

see chapter "Evaluation of visual range" on page 62

Accessories

Accessories, such as cardboard boxes, packaging, batteries and other components that are used in connection with this product and that expected to be exchanged are not covered by this warranty.

Factory-applied serial number

A product that's serial number is damaged, changed, or removed is no longer covered by this warranty.

Reaction time

The reaction time to claim a right given by this warranty starts with the customer's announcement of the claim to eyevis. It is calculated in accordance with the standard service hours of the eyevis (Monday - Friday 6:00 AM to 6:00 PM local German time, except German bank holidays).



Advised procedure for raising a claim

Consider the manual before raising a claim

See the sections on "Troubleshooting" and in the manual and check whether the problem might be solved on-site before raising a claim referring to this warranty.

Prepare necessary information

If the problem still exists, the customer should try to get support from a regional eyevis partner.

Please prepare the following information:

- Product identification (model/type) and serial number of the device
- Date and place of purchase or eyevis order number (e.g. AUF-...)
- A description of the problem in hand
- · Pick-up address and contact information
- A description of the requested service

Approval by eyevis

After performing an analysis of the faults and damages of the device, eyevis will approve your warranty claim if the necessary requirements are fulfilled.

Service code: RMA number

In case of a defect, the customer will receive a service code the RMA number. eyevis will prepare the service requested by the customer.

Packing

The customer has to pack the defective device properly in the original box, to label it as fragile, and to attach the RMA number visibly on the box. eyevis can provide a new original box on request. The customer is liable for damages caused by the use of improper or unsuitable packaging.

Transport

The customer arranges the transport of the device to eyevis . For more information, please contact eyevis .

Costs not covered by warranty defects

The eyevis reserves the right to charge the customer for costs incurred due to complaints concerning defects or faults that are not covered by warranty.

Legal and other claims

There are no other express or implied warranties, representations, or conditions than those stated in this warranty. Other legal or contractual claims, including against the seller of the product, are excluded as far as eyevis has provided service based on this warranty.

This warranty does not affect or have influence on other legal guarantee claims or other contractual claims of the customer against the seller of the product. These claims can be made alternatively to the claims referred to in this warranty document.



Limitations of liability

In cases of slight negligent breaches of duty, the liability of eyevis is limited to the direct, foreseeable, and contract-typical average damage. The slightly negligent breach of minor contractual obligations excludes the liability.

eyevis will not be liable for any loss, damage or alterations to third party accessories, hardware or software or programs, data or information stored on any media or any part of the product, no matter how it occurs, or for any loss or damage arising from loss of use, loss of profits or revenue, or for any resulting indirect or consequential loss or damage.

The policy sum regarding all requirements of the warranty does not exceed, at discretion of eyevis, the original purchase price of the product or alternatively the costs of substitution of the product.

The warranty shall not apply to repairs or service necessitated by normal wear and tear or for lack of reasonable and proper maintenance.

As far as the liability of eyevis is excluded or limited, this also applies to the personal compensation liability of its staff, employees, associated employees, agents, and auxiliary persons.

The preceding limitations of liability do not apply to the customer's claims derived from the Product Liability Act and to claims concerning damages to the body or health or in case of the loss of the life of the customer.



Appendix

Appendix: Technical specifications



EYE-LCD-4600/5500/6500-OPS

PROJECTOR:

Model:	EYE-LCD-4600-OPS	EYE-LCD-5500-OPS	EYE-LCD-6500-OPS
Description:		Professional Edge-LED LCD Monit	or
Screen Size:	46" (ca. 116 cm)	55" (ca. 139 cm)	65" (ca. 165 cm)
Display Resolution:		1920 × 1080 Pixel (full HD)	
Colours:		1,07 G Colours (10bit)	
Brightness:	500 cd/m ² (typ.)	450 cd/m ² (typ.)	360 cd/m ² (typ.)
Contrast:		4000:1 (typ.)	
Viewing Angle:		178° H/V	
Response Time:		6,5 ms (typ.)	8,0 ms (typ.)
24/7 Operation:		Yes (recommended operation 20/	7)

CONNECTORS & CONTROL:

Inputs:	$1 \times$ DisplayPort / $1 \times$ HDMl $1.3c$ / $1 \times$ DVI / $1 \times$ VGA / $1 \times$ PC Audio In / $1 \times$ IR Extender
Outputs:	Audio Out
Communication Port:	RS232 In
Control:	RS232 Control Buttons IR Remote Control

MECHANICAL:

Dimensions (W × H):	1068.3 × 620 × 68.6 mm	1257.2 × 728 × 66.3 mm	1522.8 × 897.8 × 68.4 mm
Bezel Width:	left/bottom ca. 22,1 mm right/top ca. 23,5 mm	left/top ca. 23,8 mm right/bottom ca. 23,2 mm	left/top ca. 47,2 mm right/bottom ca. 43,1 mm
Weight:	22.8 kgs (net)	30.2 kgs (net)	57 kgs (net)
VESA Mount:	2	000 × 400	400 × 400 / 400 × 600

OPERATING CONDITIONS:

Power Consumption:	ca. 135 Watt (max.)	ca. 155 Watt (max.)	≤ 290W (max.)
Input Voltage:		110V – 240V AC, 50/60 Hz	
Operating Temperature:		0°C - 45°C (10 - 90% RH non-conden	sing)

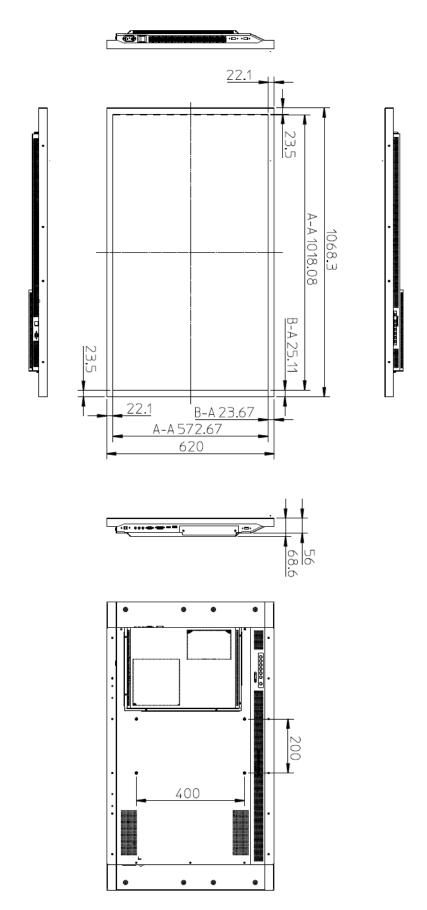
OPTIONS:

Touch Surface:	Infrared touch system with up to 6 simultaneous touch point
Installation:	Metal stands, carts, wall-/ceiling-mounts, different video wall mounts, video wall carts
Housing Colour:	Customised frame colours and logo branding



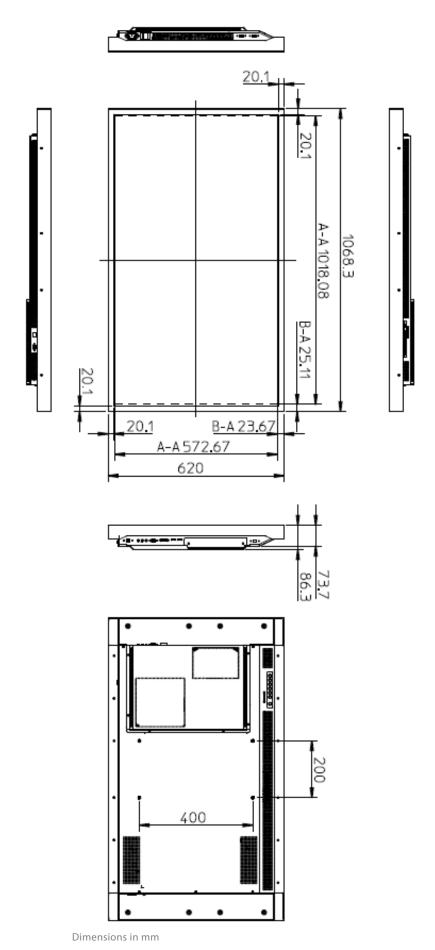
Appendix: Dimensions

Dimensions EYE-LCD-4600-OPS



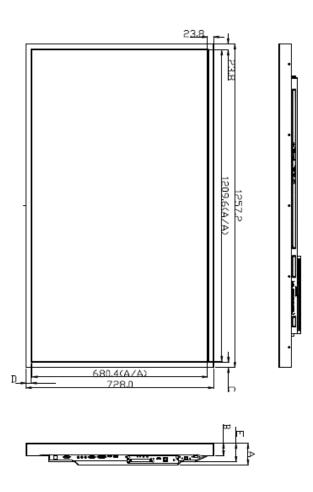


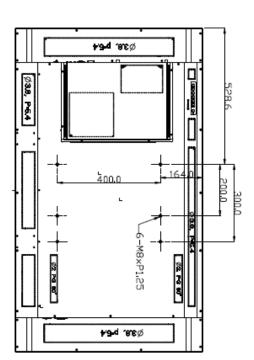
Dimensions EYE-LCD-4600-OPS-Touch





Dimensions EYE-LCD-5500-OPS(-Touch)



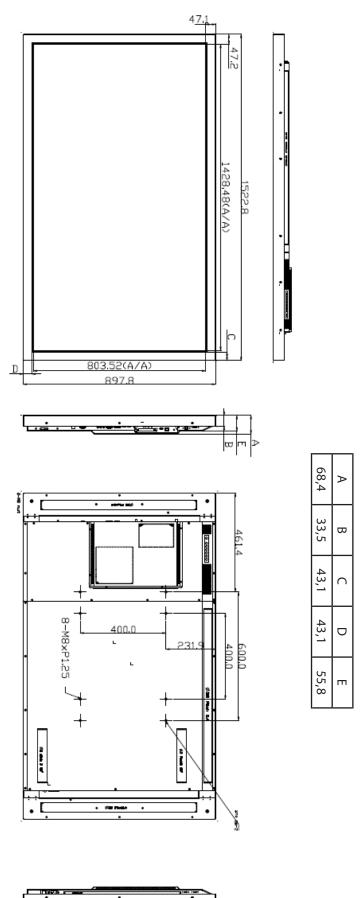


	А	В	С	D	Е
-LCD-5500-OPS	66,3	31	22,2	22,2	53,6
-LCD-5500-OPS-Touch	84,1	48,8	20,1	20,1	71,4





Dimensions EYE-LCD-6500-OPS



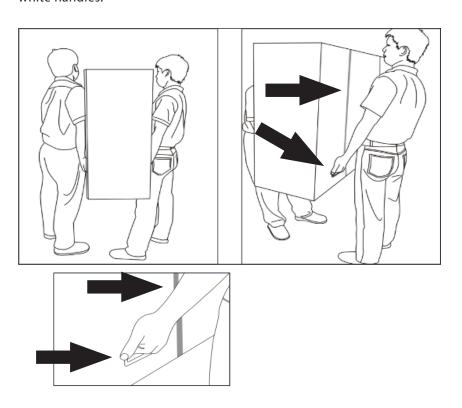
Dimensions in mm



Appendix: Package handling

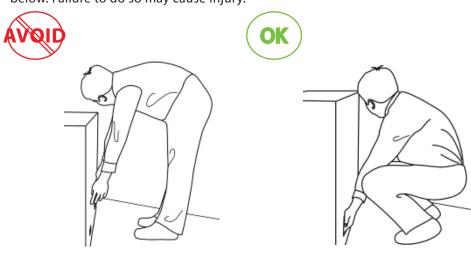
Moving the monitor

Moving the monitor requires at least two people. Attempting to move the monitor with one person may result in dropping the monitor and/or serious injury. When moving a monitor in its shipping carton, lift the carton using the white handles.



Carrying the monitor

This monitor is heavy; please follow proper lifting technique, as pictured below. Failure to do so may cause injury.





Appendix: Installing the wall mount kit

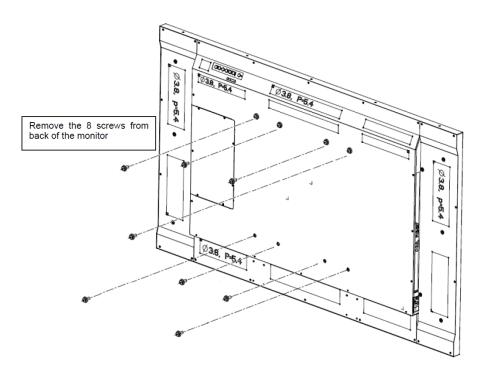
- ✓ Follow the manual instructions for the type of mount you have selected. Refer all servicing to qualified service personnel.
- ✓ Moving the monitor requires at least two people.
- ✓ Before installing, please make sure the wall is strong enough to hold the necessary weight of the display and the mount.

Installing the wall mount kit

- 1. Place the monitor (LCD screen face down) on a flat, stable surface, which has been covered with a soft cloth. This will help prevent the monitor from being scratched.
- 2. Remove the screws (M8*15 screw x2) from the stand bracket at the back of the monitor.
- 3. Align the stand brackets with the mounting holes and attach the brackets to the monitor using the screws removed in Step 2.
- 4. Longer screws will damage the monitor. Maximum screw length: 15 mm/0.59 inches

NOTICE

Do not use screws longer than 15 mm to attach the table stand. Longer screws will damage the monitor.



Maximum screw length: 15 mm/0.59 inches

Screw thread: M8 (8 mm metric)



Appendix: Controlling the display through Ethernet

Overview

To control the display via an Ethernet (LAN) connection, the following steps need to be performed:

- 1. Check whether your display has the Ethernet option installed
- 2. Assign an IP address to the display
- 3. Connect the display to the local area network (LAN)
- 4. Use the Windows PC to control the display

) NOTE

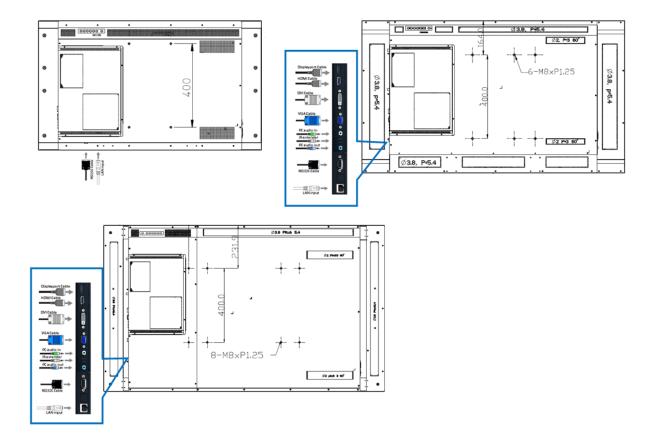
Controlling the display through Ethernet is recommended for experienced users only. Technical knowledge of your local area network (LAN) and/or assistance from your system administrator may be required.

Locating the LAN connector on your display

The EYE-LCD-4600/5500/6500-OPS can optionally be equipped with a RJ45 Ethernet port that can be used to control the display via a local area network (LAN).

To determine whether you display is equipped with this option, check the connector panel in the rear of the display, as illustrated below.

- 1. If the RJ45 connector (as indicated with the arrow) is marked "LAN", then the Ethernet option is installed.
- 2. If there are two RJ45 connectors marked "RS485 IN" and "RS485 OUT", then the Ethernet option is NOT installed.





Assigning an IP address to the display

To assign an IP address to your display, access the Network Settings Menu under Advanced Settings -> Ethernet Setup (page 41). Consult your system administrator if you do not know how to configure the parameters shown in the menu. Select "Save Network Settings" to save the desired settings.

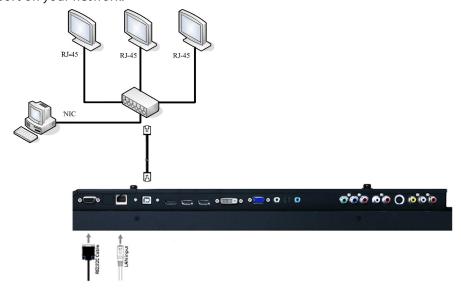


The default settings are shown below.

Control Item	Setting
Dynamic IP	Disable
Static IP Adress	192.168.2.1
Subnet Mask	255.255.255.0
Gateway	192.168.2.1
DNS Addr.	192.168.2.1

Connecting the display to the network

One or several eyevis displays can be connected to the network using standard RJ45 network cables. Connect the LAN port on the display to an active RJ45 port on your network.





Appendix: RS232 Protocol

Serial port default settings

Setting	Value
Baud Rate:	115200
Data Bit:	8
Parity Bit:	None
Stop Bit:	1

Description of commands

Structure of the protocol:

<INSTRUCTION> (<DEVICE_ID> ; <COMMAND> ; <ARGUMENTS>)

Structure description:

<INSTRUCTION> (<DEVICE_ID> ; <COMMAND> ; <ARGUMENTS>)

The following instructions are available.

Read Instruction	Description	
GET	Instruction to read values. Any following arguments are ignored.	

Write Instruction	Description
SET	Instruction to write values, implies the existence of one or more arguments.

Other Instruction	Description
FORMAT	Service command to delete specific settings on device.

<INSTRUCTION> (<DEVICE_ID> ; <COMMAND> ; <ARGUMENTS>)

CEVICE_ID> is used to select a specified device in a daisy chain. The actual devices can not be daisy chained. The devices answers only requests with the ID "0"(zero) or "1"(one) and always with the response ID "1" (one).

Example:

Request: SET(1;POWER;1) Response: ACK(1)
Request: SET(0;POWER;1) Response: ACK(1)

<INSTRUCTION> (<DEVICE_ID> ; <COMMAND> ; <ARGUMENTS>)

You can see the commands in the attached table on page 79.



<INSTRUCTION> (<DEVICE_ID> ; <COMMAND> ; <ARGUMENTS>)

 are optional and only used with SET commands. Any Arguments in a GET command are ignored.

Responses

Read Instruction	Positive Response	Negative Response	
GET	DATA(1; <command/> ; <values>)</values>	NACK(1)	

Write Instruction	Positive Response	Negative Response	
SET	ACK(1)	NACK(1)	

Other Instruction	Positive Response	Negative Response	
FORMAT	ACK(1)	NACK(1)	

) NOTE:

Unknown instructions are always answered with NACK(<DEVICE_ID>).

Command: GET(<DEVICE_ID>;ALL)

The device transmits all available data and an acknowledgement after the last transmitted data.

Command examples

Instruction	Response
→ GET(0;ALL)	← DATA(1;POWER;1) ← DATA(1;INPUT_SOURCE;7) ← DATA(1;BACKLIGHT;80) ← DATA(1;BACKLIGHT_EN;1) ← DATA(1;AUDIO_VOLUME;20) ← ACK(1)
→ FORMAT(1;ALL) //factory reset	← ACK(1)

) TIP:

- Protocol is not case sensitive
- Response is always in upper case
- Any whitespaces are ignored



Command list

	Function	Command	Possible Values	Default Values	Comment
Power	Switch the LCD On/Off	POWER	0=OFF 1=ON		Controls only display
Po	Switch the EPU On/Off	EPU_POWER	0=OFF 1=ON		Controls only EPU
Input	Change Input Source	INPUT_SOURCE	0 = VGA 1 = DVI 2 = HDMI 3 = DP 4 = EPU		
	Automatic Input Scanning	INPUT_SOURCE_SCAN_EN	0=OFF 1=ON	1	
	Contrast	IMAGE_CONTRAST	0-100	80	
	Brightness	IMAGE_BRIGHTNESS	0-100	80	
	Sharpness	IMAGE_SHARPNESS	0-8	0	
	Hue	IMAGE_HUE	0-100	80	
	Gamma	COLOR_GAMMA	0=Off, 1=2,2	0	
Picture	Saturation	IMAGE_SATURATION	0-100	80	
	Backlight On/Off	BACKLIGHT_EN	0=OFF 1=ON	1	
	Backlight Brightness	BACKLIGHT	0-100	80	
	Smart Light Control	BACKLIGHT_SLC_EN	0 = Off 1 = DCR 2 = Light Sensor	0	
	Color Scheme Selection	COLOR_SCHEME	0 = User 1 = Sport 2 = Game 3 = Cinema 4 = Vivid	0	
	Scaling Aspects	IMAGE_SCALING	0 = Auto 1 = Fill 2 = Pillar Box	0	
Color Management	Color Temperature Presets	COLOR_TEMPERATURE	0 = USER 1 = 5000 2 = 6500 3 = 7500 4 = 9300	0	
nag	Red Gain	COLOR_RED_GAIN	0-255	128	
Mai	Green Gain	COLOR_GREEN_GAIN	0-255	128	
lor	Blue Gain	COLOR_BLUE_GAIN	0-255	128	
ပိ	Red Offset	COLOR_RED_OFFSET	0-100	50	
	Green Offset	COLOR_GREEN_OFFSET	0-100	50	
	Blue Offset	COLOR_BLUE_OFFSET	0-100	50	



	Time	TIMER_CLOCK	HH:MM:SS		
	Date	TIMER_DATE	DD/MM/YYYY		
	Scheduler	TIMER_SCHEDULER_EN	WWW(-WWW), 0-1		Write only
Timer Settings	Sceduler Time	TIMER_SCHEDULER_TIME	WWW(-WWW), HH:MM:SS- HH:MM:SS [WWW = Mon Tue Wed Thu Fri Sat Sun]		Write only
•	Sleep Settings	SLEEP_SETTINGS	0 = Never Sleep 1 = Wake On VGA only 2 = Wake On VGA, Digital, RS232¶	0	
	Auto Adjust	IMAGE_ANALOG_ AUTOADJUST	1		Trigger by sending value 1
RGB	Horizontal Image Position	IMAGE_ANALOG_POS_H	0-5000	0	
RG	Horizontal Image Position	IMAGE_ANALOG_POS_V	0-5000	0	
	VGA Phase	IMAGE_ANALOG_PHASE	0-63	40	
	VGA Clock	IMAGE_ANALOG_CLOCK	0-100	80	
	OSD Language	OSD_LANGUAGE	0 = English 1 = German	0	
	OSD Transparency	OSD_TRANSPARENCY	0-12	0	
	OSD Timeout	OSD_TIMEOUT	5-120	30	in seconds
OSD	OSD Zoom	OSD_ZOOM	0 = Off 1 = Small 2 = Big	0	
	OSD Horizontal Position	OSD_POSITION_H	0-1000	500	
	OSD Vertical Position	OSD_POSITION_V	0-1000	500	
	OSD Rotation	OSD_ROTATION	0 = Landscape 1 = Portrait	0	
	Volume	AUDIO_VOLUME	0-100	20	
	Mute	AUDIO_MUTE_EN	0=OFF 1=ON	Off	
gs	Bass	AUDIO_BASS	0-12	0	
tin	Treble	AUDIO_TREBLE	0-12	0	
Set	Balance	AUDIO_BALANCE	0-12	0	
Audio Settings	Input HDMI Source	AUDIO_INPUT_HDMI_ SOURCE	0 = Analog In 1 = HDMI	1	
	Input DP Source	AUDIO_INPUT_DP_ SOURCE	0 = Analog In 1 = Display Port	1	
	Turn on the internal speaker	AUDIO_INTERNAL_ SPEAKER	0=OFF 1=ON	1	



Advanced Setup	Reset Display	CPU_RESET	1		Trigger by sending value 1
	Baud Rate Adjustment	COM_RS232_BAUD	0 = 115200 1 = 38400 2 = 19200 3 = 9600		
	Remote Control Unit	COM_RC_KEY	0 = Menu 1 = Info 2 = Up 3 = Down 4 = Left 5 = Right 6 = Enter 7 = Exit		Write only
	Remote Control Keys	COM_RC_KEYS_EN	0 = Keys Disable 1 = Keys Enable		
	LAN On/Off	COM_LAN_EN	0=OFF 1=ON		
	Dynamic IP Setting	COM_LAN_DYNAMIC_IP	0=OFF 1=ON		
anc	LAN IP Setting	COM_LAN_IP	xxx.xxx.xxx		
Adv	LAN Subnet mask Setting	COM_LAN_SM	xxx.xxx.xxx		
	LAN Gateway Setting	COM_LAN_GW	xxx.xxx.xxx		
	LAN DNS IP Setting	COM_LAN_DNS_IP	xxx.xxx.xxx		
	LAN Save Settings	COM_LAN_SAVE_ SETTINGS	1		Trigger by sending value 1 Note: To activate the LAN settings execute this command.
	LAN Reset Settings	COM_LAN_LOAD_ DEFAULTS	1		Trigger by sending value 1
	MAC Address	COM_LAN_MAC			Read only
	Front LED On/Off	FRONT_LED_ENABLE	0=OFF 1=ON	1	
	IRFM On/Off	IRFM_EN	0=OFF 1=ON	0	
Info	Serial Number	INFO_SERIAL_ENGINE			Read only
	Model Number	DEVICE_MODEL_NUMBER			Read only
	Firmware Version	INFO_VERSION_CPU_FW			Read only
	RS232 Table Version	INFO_VERSION_DB			Read only
	Source Resolution Vertical	MAIN_SOURCE_ RESOLUTION_H			Read only
	Source Resolution Horizontal	MAIN_SOURCE_ RESOLUTION_W			Read only
	Device Type	DEVICE_TYPE			Read only



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